

Data Path : Z:\VOASRV\HPCHEM1\MSVOA_N\DATA\VN101218\
 Data File : VN051833.D
 Acq On : 12 Oct 2018 15:26
 Operator : MD\SY
 Sample : J5164-09 2.5ppb
 Misc : 5.00mL/MSVOA_N/WATER
 ALS Vial : 12 Sample Multiplier: 28

Instrument :
 MSVOA_N
 ClientSampleId :
 MDL-WATER-03-QT4-2018

Manual Integrations
 APPROVED

MMDadoda
 10/15/2018 11:27:58 AM

Quant Time: Oct 13 03:35:26 2018
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_N\METHODS\624N101218W.M
 Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
 QLast Update : Fri Oct 12 10:23:44 2018
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	7.20	128	126299	30.00	ug/l	0.00
28) 1,4-Difluorobenzene	8.59	114	695401	30.00	ug/l	0.00
57) Chlorobenzene-d5	11.41	117	581271	30.00	ug/l	0.00

System Monitoring Compounds

27) 1,2-Dichloroethane-d4	8.03	65	242078	31.50	ug/l	0.00
Spiked Amount	30.000	Range	50 - 169	Recovery	=	105.00%
60) 4-Bromofluorobenzene	12.40	95	217660	25.97	ug/l	0.00
Spiked Amount	30.000	Range	56 - 143	Recovery	=	86.57%
63) Toluene-d8	10.09	98	809645	32.08	ug/l	0.00
Spiked Amount	30.000	Range	66 - 137	Recovery	=	106.93%

Target Compounds

						Qvalue
2) Dichlorodifluoromethane	1.85	85	13121	2.67	ug/l	96
3) Chloromethane	2.06	50	15363	2.96	ug/l	98
4) Vinyl Chloride	2.18	62	21608	2.79	ug/l	97
5) Bromomethane	2.57	94	22377	3.27	ug/l	86
6) Chloroethane	2.70	64	16747	3.00	ug/l	94
7) Trichlorofluoromethane	3.01	101	31745	2.88	ug/l	99
8) Diethyl Ether	3.41	74	9270	2.88	ug/l	74
9) 1,1,2-Trichlorotrifluoroet	3.76	101	18162	2.89	ug/l #	74
10) 1,1-Dichloroethene	3.74	96	16017	2.75	ug/l	84
11) Methyl Iodide	3.95	142	17041	2.02	ug/l	93
12) Methyl Acetate	4.34	43	10287	2.85	ug/l	97
13) Acrolein	3.62	56	4702m	19.76	ug/l	
14) Acrylonitrile	4.99	53	19269m	11.94	ug/l	
15) Acetone	3.83	58	4942m	12.39	ug/l	
16) Carbon Disulfide	4.06	76	35926	2.35	ug/l #	90
17) Allyl chloride	4.32	41	16745	2.43	ug/l	81
18) Methylene Chloride	4.55	84	19486	3.00	ug/l	94
19) trans-1,2-Dichloroethene	5.04	96	18636	2.81	ug/l	87
20) Diisopropyl ether	5.96	45	41473	2.70	ug/l #	86
21) 1,1-Dichloroethane	5.85	63	29122	2.71	ug/l	98
22) cis-1,2-Dichloroethene	6.83	96	20306	2.60	ug/l	84
23) tert-Butyl Alcohol	4.80	59	6664m	15.68	ug/l	
24) Methyl tert-Butyl Ether	5.06	73	46786	2.79	ug/l #	60
25) Chloroform	7.37	83	33022	2.59	ug/l	97
26) Cyclohexane	7.65	56	24150	2.65	ug/l #	73
29) 1,1-Dichloropropene	7.79	75	23475	2.62	ug/l	93
30) 2-Butanone	6.85	43	22904	12.23	ug/l #	90
31) 2,2-Dichloropropane	6.83	77	25754	2.44	ug/l #	78
32) 1,1,1-Trichloroethane	7.57	97	31257	2.63	ug/l	95
33) Carbon Tetrachloride	7.78	117	26658	2.48	ug/l	93
34) Benzene	8.04	78	74634	2.81	ug/l #	68
35) Methacrylonitrile	7.21	41	8927m	3.63	ug/l	
36) 1,2-Dichloroethane	8.13	62	24445	2.88	ug/l	96
37) Trichloroethene	8.83	130	21829	2.65	ug/l	94
38) Methylcyclohexane	9.08	83	29231	2.54	ug/l	83
39) 1,2-Dichloropropane	9.12	63	16793	2.69	ug/l	96
40) Dibromomethane	9.21	93	11853	2.56	ug/l	91

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Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
41) Bromodichloromethane	9.40	83	22946	2.40	ug/l	92
42) Vinyl Acetate	5.90	43	133806	12.69	ug/l #	92
43) Ethyl Acetate	6.93	43	8891	2.19	ug/l #	71
44) Isopropyl Acetate	8.17	43	20733	2.55	ug/l	98
45) 1,4-Dioxane	9.21	88	3370	51.65	ug/l #	75
46) Methyl methacrylate	9.20	41	9543	2.55	ug/l	77
47) n-amyl Acetate	12.07	43	11867	1.74	ug/l #	80
48) t-1,3-Dichloropropene	10.38	75	20459	2.19	ug/l	99
49) cis-1,3-Dichloropropene	9.84	75	23646	2.30	ug/l	98
50) 1,1,2-Trichloroethane	10.56	97	16531	2.58	ug/l	96
51) Ethyl methacrylate	10.43	69	16804	2.29	ug/l	86
52) 1,3-Dichloropropane	10.71	76	25343	2.56	ug/l	97
53) Dibromochloromethane	10.90	129	17023	2.15	ug/l	91
54) 1,2-Dibromoethane	11.01	107	16523	2.46	ug/l	98
55) 2-Chloroethyl vinyl ether	9.70	63	36007	11.49	ug/l	93
56) Bromoform	12.13	173	9066	1.74	ug/l #	90
58) 4-Methyl-2-Pentanone	9.99	43	55695	14.32	ug/l #	89
59) 2-Hexanone	10.75	43	31726m	12.09	ug/l	
61) Tetrachloroethene	10.63	164	21010	2.83	ug/l	91
62) Toluene	10.16	91	81697	2.83	ug/l	98
64) Chlorobenzene	11.43	112	51274	2.71	ug/l	95
65) 1,1,1,2-Tetrachloroethane	11.51	131	18234	2.51	ug/l	98
66) Ethyl Benzene	11.51	91	81130	2.54	ug/l	99
67) m/p-Xylenes	11.62	106	64029	4.95	ug/l	99
68) o-Xylene	11.95	106	31882	2.50	ug/l	94
69) Styrene	11.97	104	40170	2.05	ug/l	95
70) Isopropylbenzene	12.25	105	85288	2.51	ug/l	100
71) 1,1,2,2-Tetrachloroethane	12.51	83	16966	2.53	ug/l	93
72) 1,2,3-Trichloropropane	12.56	75	15895m	3.01	ug/l	
73) Bromobenzene	12.53	156	19407	2.30	ug/l	86
74) n-propylbenzene	12.59	91	81463	2.23	ug/l	93
75) 2-Chlorotoluene	12.68	91	52198	2.43	ug/l	93
76) 1,3,5-Trimethylbenzene	12.73	105	64373	2.29	ug/l	97
77) t-1,4-Dichloro-2-butene	12.31	75	2929	1.68	ug/l	85
78) 4-Chlorotoluene	12.78	91	43674	2.07	ug/l	96
79) tert-butylbenzene	12.99	119	63125	2.44	ug/l	99
80) 1,2,4-Trimethylbenzene	13.04	105	58902	2.10	ug/l	96
81) sec-Butylbenzene	13.17	105	73740	2.18	ug/l	97
82) p-Isopropyltoluene	13.29	119	60856	2.01	ug/l	96
83) 1,3-Dichlorobenzene	13.28	146	26775	1.80	ug/l	97
84) 1,4-Dichlorobenzene	13.37	146	24037	1.72	ug/l	94
85) n-Butylbenzene	13.62	91	34971	1.53	ug/l	98
86) Hexachloroethane	13.88	117	10432	2.00	ug/l	83
87) 1,2-Dichlorobenzene	13.65	146	26997	1.88	ug/l	98
88) 1,2-Dibromo-3-Chloropropan	14.27	75	1864	1.86	ug/l #	78
89) 1,2,4-Trichlorobenzene	14.91	180	8125	8.58	ug/l	96
90) Hexachlorobutadiene	15.01	225	9424	2.03	ug/l	88
91) Naphthalene	15.13	128	20398	9.57	ug/l	98
92) 1,2,3-Trichlorobenzene	15.32	180	9351	1.43	ug/l	94

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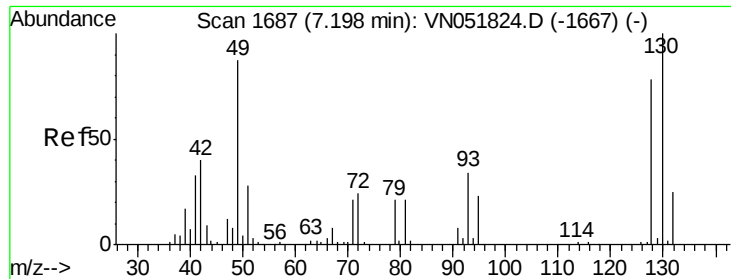
Manual Integrations
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Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
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(#) = qualifier out of range (m) = manual integration (+) = signals summed



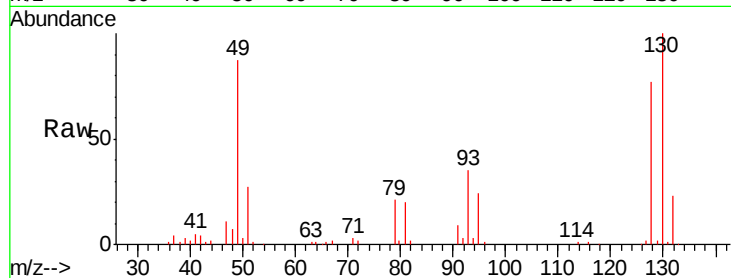
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Bromochloromethane
Concen: 30.00 ug/l
RT: 7.20 min Scan# 1687
Delta R.T. -0.00 min
Lab File: VN051833.D
Acq: 12 Oct 2018 15:26

Instrument :
MSVOA_N
ClientSampleId :
MDL-WATER-03-QT4-2018

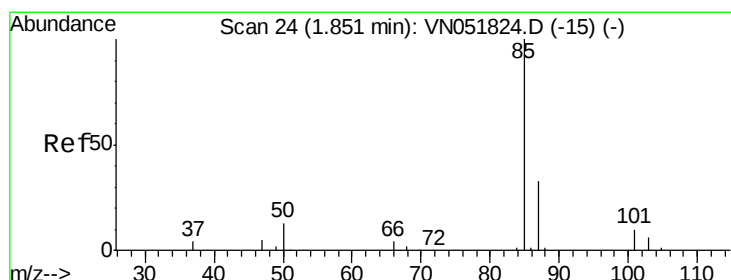
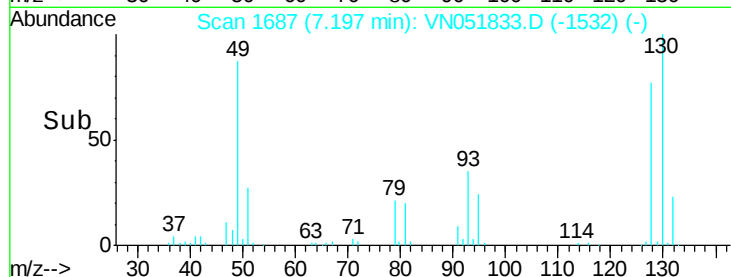
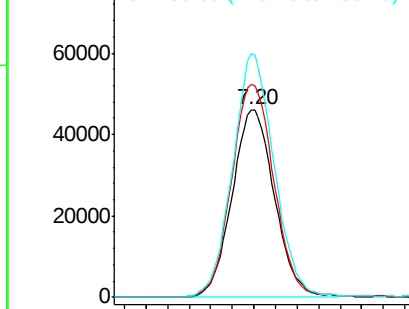
Tgt Ion	Ratio	Resp	Lower	Upper
128	100	126299		
49	113.3	0.0	403.3	
130	126.6	0.0	326.0	

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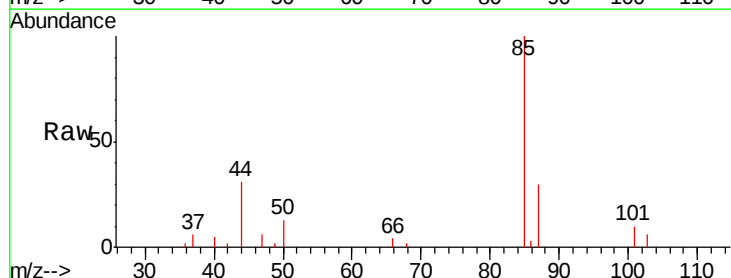


Abundance Ion 128.00 (127.70 to 128.70): V
Ion 49.00 (48.70 to 49.70): VN
Ion 130.00 (129.70 to 130.70): V

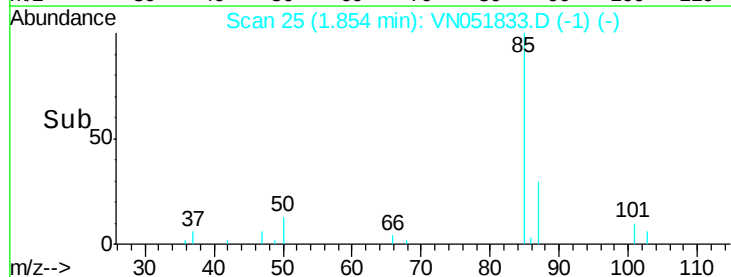
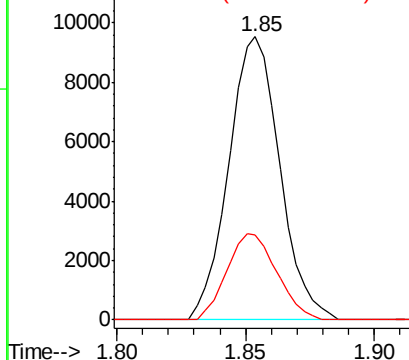


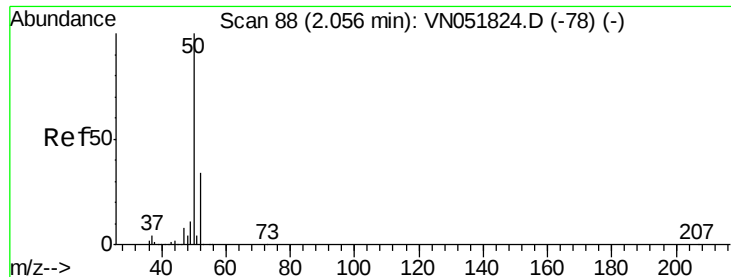
#2
Dichlorodifluoromethane
Concen: 2.67 ug/l
RT: 1.85 min Scan# 25
Delta R.T. 0.00 min
Lab File: VN051833.D
Acq: 12 Oct 2018 15:26

Tgt Ion	Ratio	Resp	Lower	Upper
85	100	13121		
87	30.2	16.3	48.8	



Abundance Ion 85.00 (84.70 to 85.70): VN
Ion 87.00 (86.70 to 87.70): VN





#3

Chloromethane

Concen: 2.96 ug/l

RT: 2.06 min Scan# 89

Delta R.T. -0.00 min

Lab File: VN051833.D

Acq: 12 Oct 2018 15:26

Instrument :

MSVOA_N

ClientSampleId :

MDL-WATER-03-QT4-2018

Tgt Ion: 50 Resp: 15363

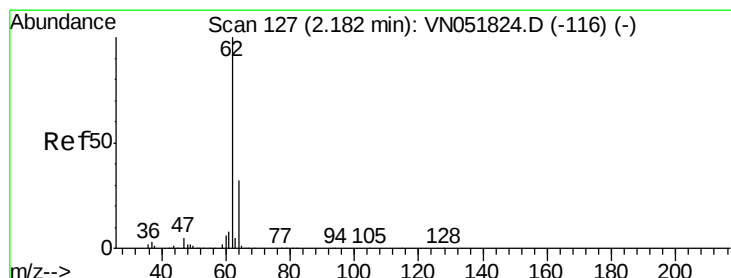
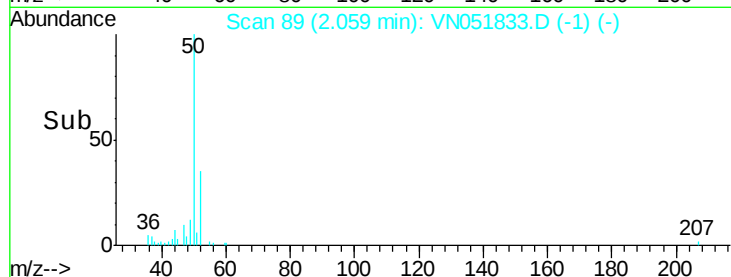
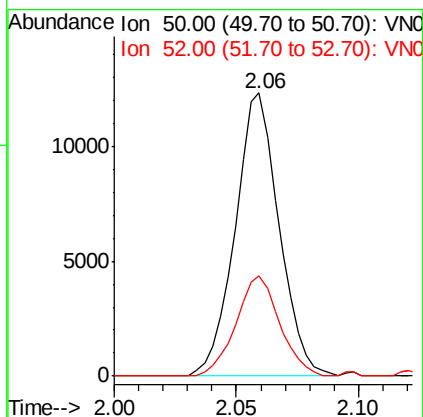
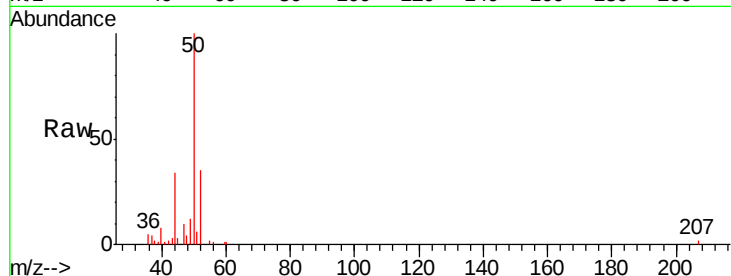
Ion Ratio Lower Upper

50 100

52 35.4 27.2 40.8

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#4

Vinyl Chloride

Concen: 2.79 ug/l

RT: 2.18 min Scan# 128

Delta R.T. 0.00 min

Lab File: VN051833.D

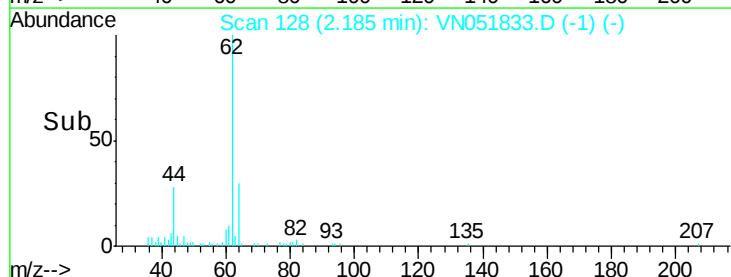
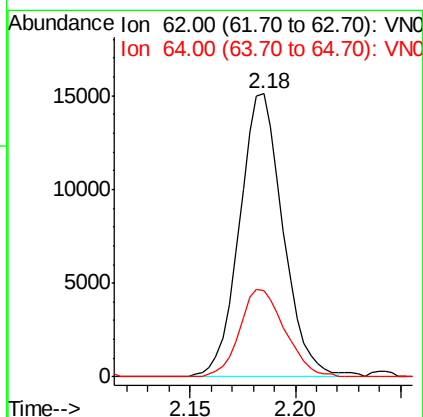
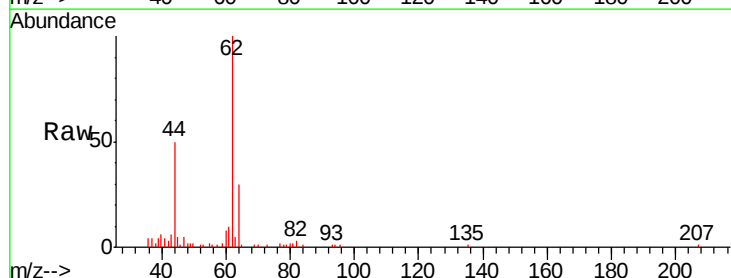
Acq: 12 Oct 2018 15:26

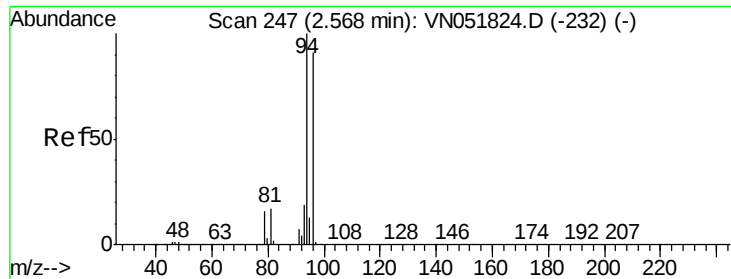
Tgt Ion: 62 Resp: 21608

Ion Ratio Lower Upper

62 100

64 30.3 25.4 38.2





#5

Bromomethane

Concen: 3.27 ug/l

RT: 2.57 min Scan# 248

Delta R.T. 0.01 min

Lab File: VN051833.D

Acq: 12 Oct 2018 15:26

Instrument :

MSVOA_N

ClientSampleId :

MDL-WATER-03-QT4-2018

Tgt Ion: 94 Resp: 22377

Ion Ratio Lower Upper

94 100

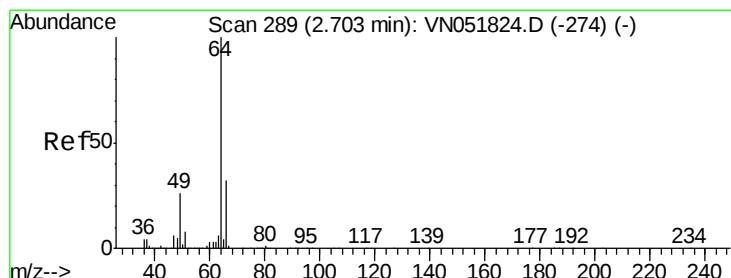
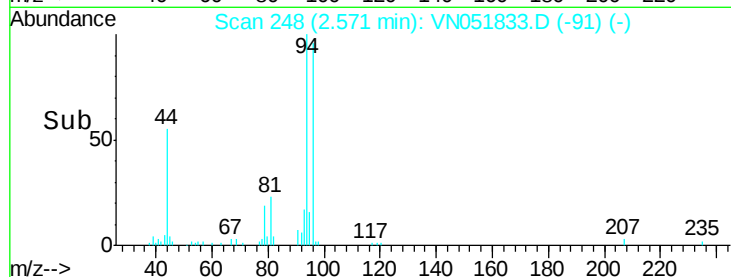
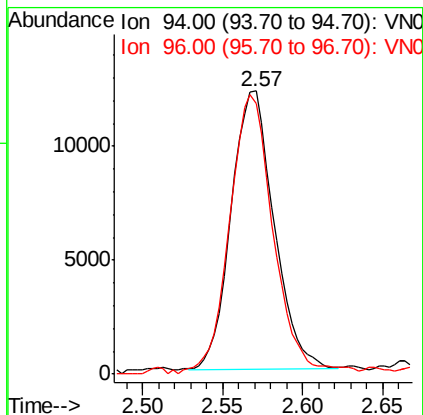
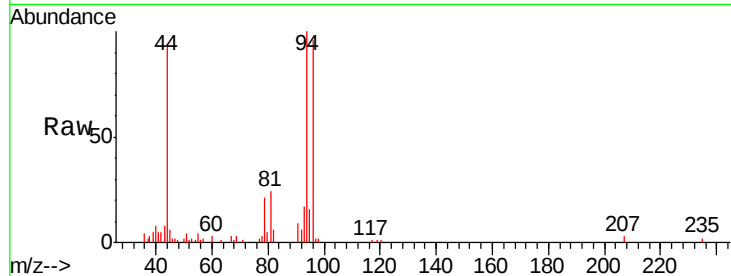
96 95.2 66.4 99.6

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#6

Chloroethane

Concen: 3.00 ug/l

RT: 2.70 min Scan# 289

Delta R.T. 0.00 min

Lab File: VN051833.D

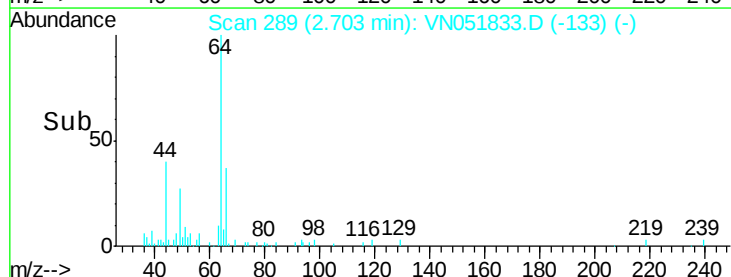
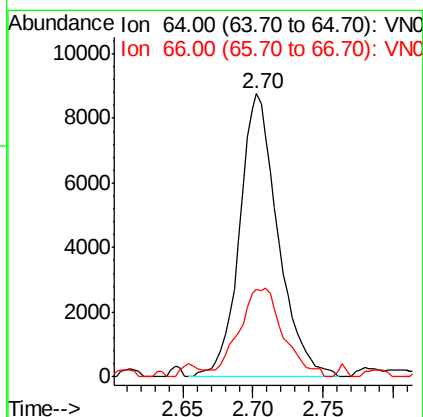
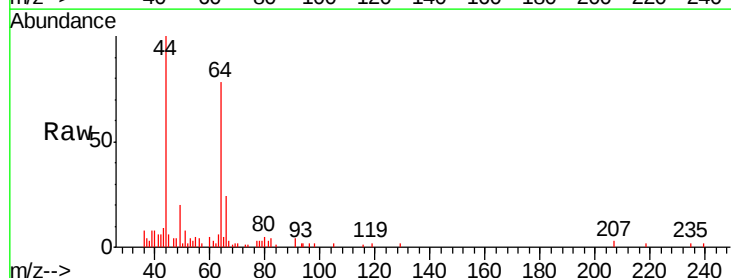
Acq: 12 Oct 2018 15:26

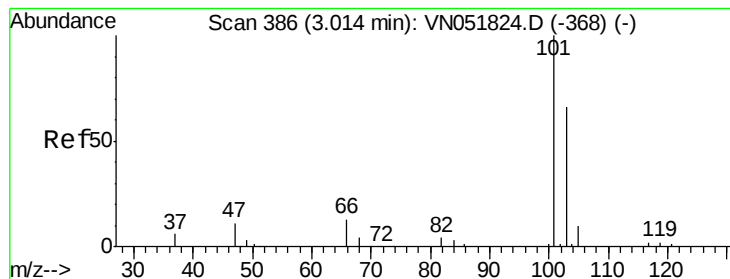
Tgt Ion: 64 Resp: 16747

Ion Ratio Lower Upper

64 100

66 28.8 25.8 38.6





#7

Trichlorofluoromethane

Concen: 2.88 ug/l

RT: 3.01 min Scan# 386

Delta R.T. 0.00 min

Lab File: VN051833.D

Acq: 12 Oct 2018 15:26

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MDL-WATER-03-QT4-2018

Tgt Ion: 101 Resp: 31745

Ion Ratio Lower Upper

101 100

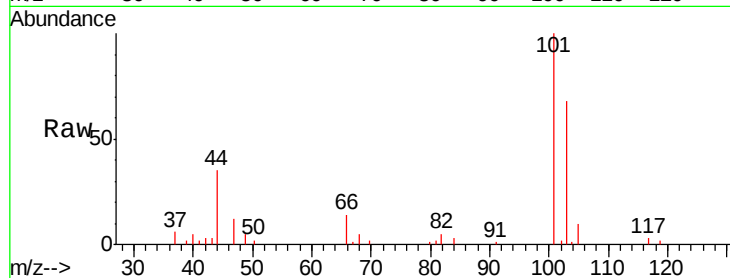
103 68.0 54.8 82.2

Manual Integrations

APPROVED

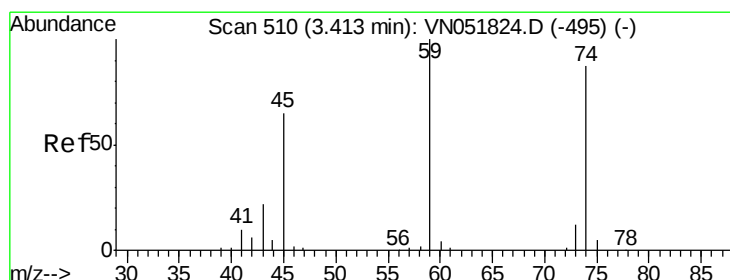
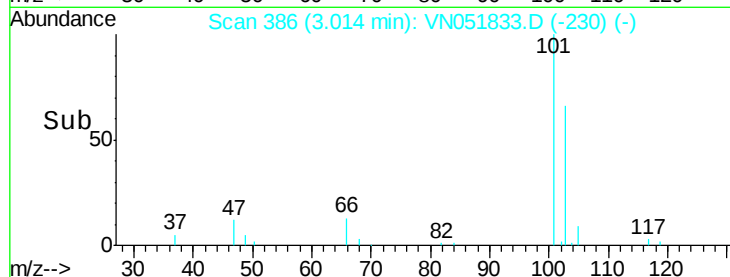
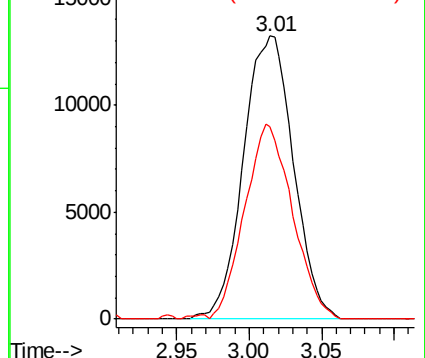
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Abundance Ion 101.00 (100.70 to 101.70): V

Ion 103.00 (102.70 to 103.70): V



#8

Diethyl Ether

Concen: 2.88 ug/l

RT: 3.41 min Scan# 509

Delta R.T. -0.00 min

Lab File: VN051833.D

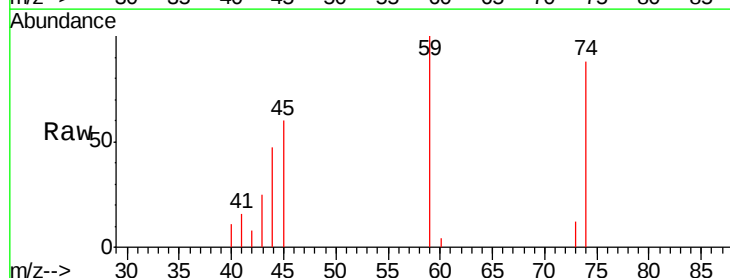
Acq: 12 Oct 2018 15:26

Tgt Ion: 74 Resp: 9270

Ion Ratio Lower Upper

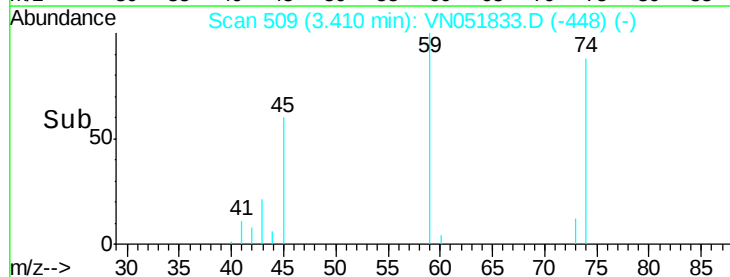
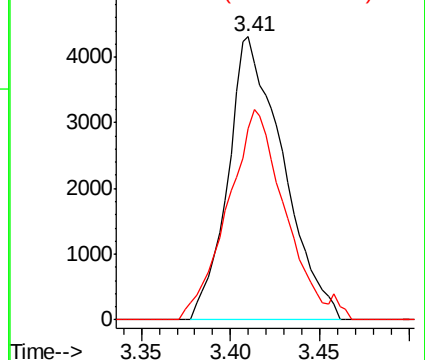
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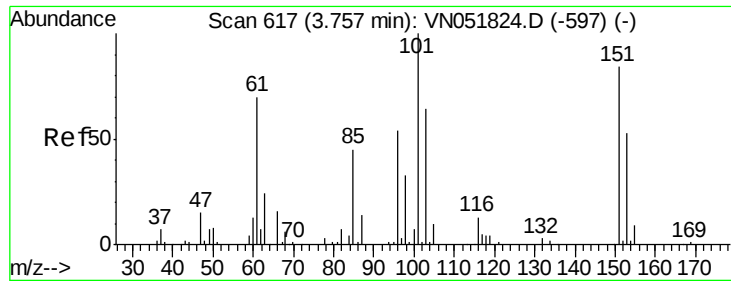
45 76.6 20.7 186.5



Abundance Ion 74.00 (73.70 to 74.70): V

Ion 45.00 (44.70 to 45.70): V





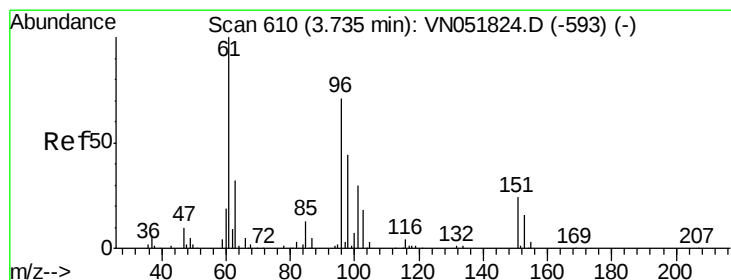
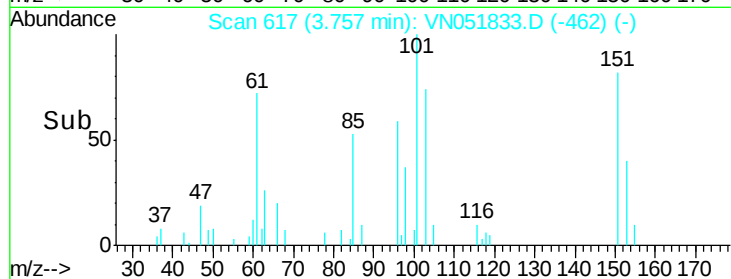
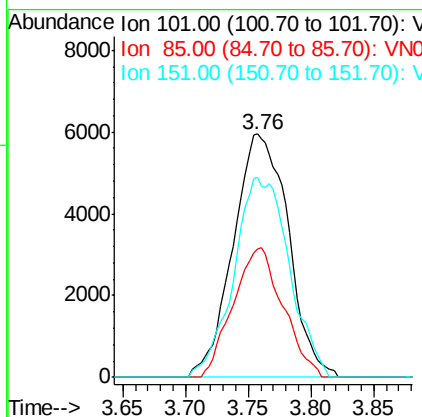
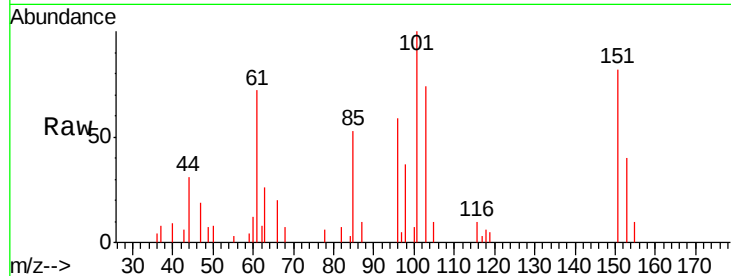
#9
 1,1,2-Trichlorotrifluoroethane
 Concen: 2.89 ug/l
 RT: 3.76 min Scan# 617
 Delta R.T. -0.00 min
 Lab File: VN051833.D
 Acq: 12 Oct 2018 15:26

Instrument :
 MSVOA_N
 ClientSampleId :
 MDL-WATER-03-QT4-2018

Tgt Ion	Ratio	Resp	Lower	Upper
101	100	18162		
85	48.3	0.0	46.0	
151	48.1	0.0	82.2	

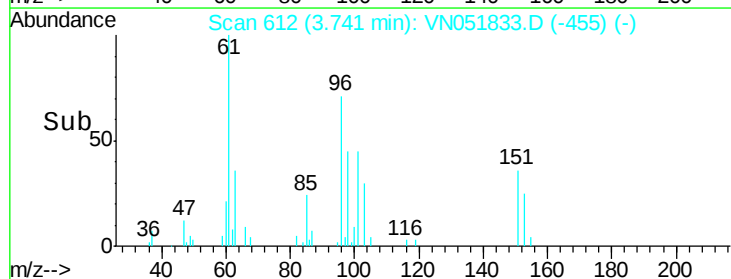
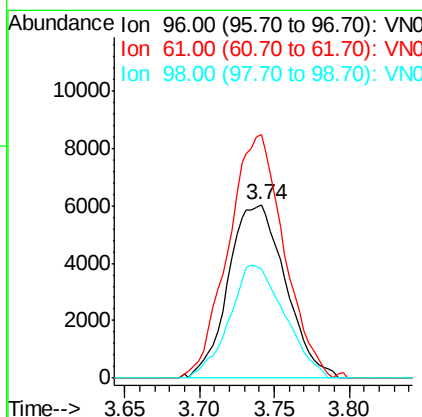
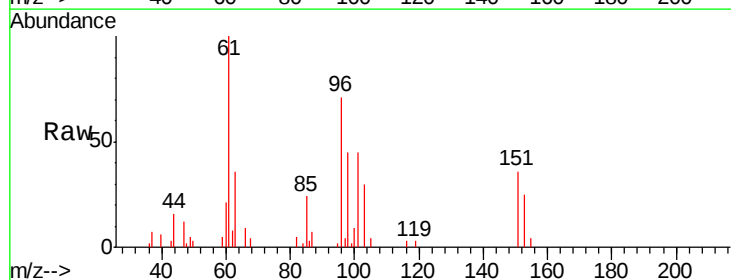
Manual Integrations
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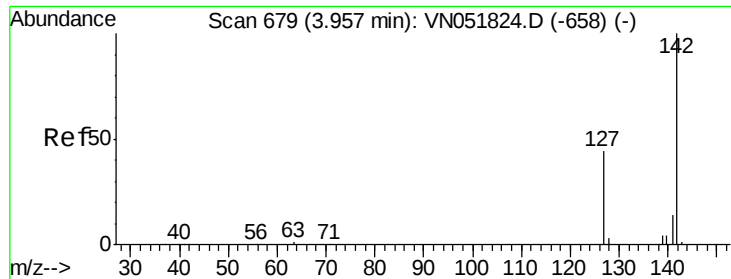
MMDadoda
 10/15/2018 11:27:58 AM



#10
 1,1-Dichloroethene
 Concen: 2.75 ug/l
 RT: 3.74 min Scan# 612
 Delta R.T. 0.01 min
 Lab File: VN051833.D
 Acq: 12 Oct 2018 15:26

Tgt Ion	Ratio	Resp	Lower	Upper
96	100	16017		
61	138.0	133.0	199.6	
98	62.7	52.6	78.8	





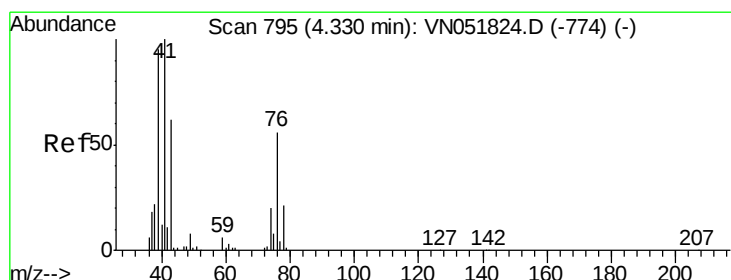
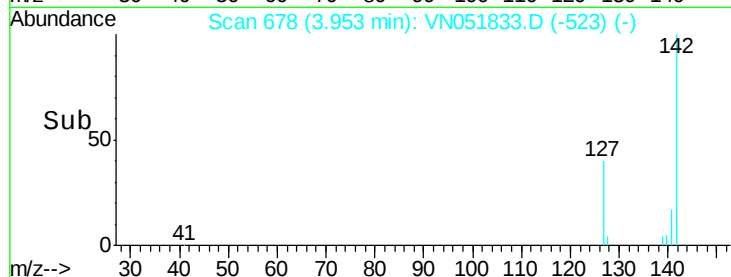
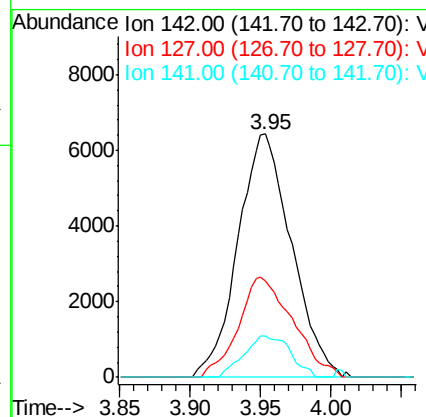
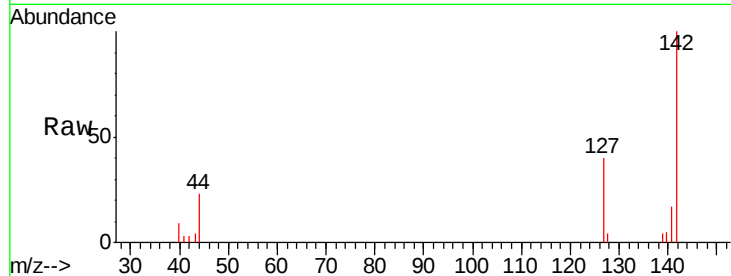
#11
Methyl Iodide
Concen: 2.02 ug/l
RT: 3.95 min Scan# 678
Delta R.T. -0.00 min
Lab File: VN051833.D
Acq: 12 Oct 2018 15:26

Instrument :
MSVOA_N
ClientSampleId :
MDL-WATER-03-QT4-2018

Tgt Ion	Ratio	Lower	Upper
142	100		
127	43.5	19.7	59.0
141	15.8	6.3	18.9

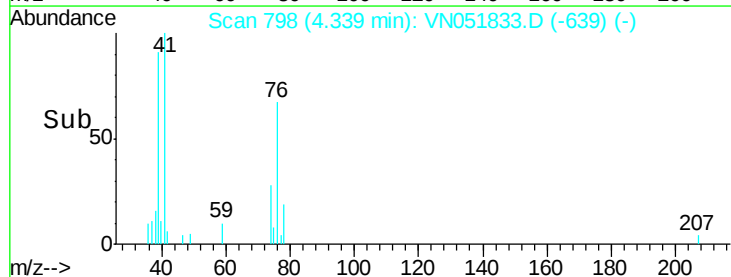
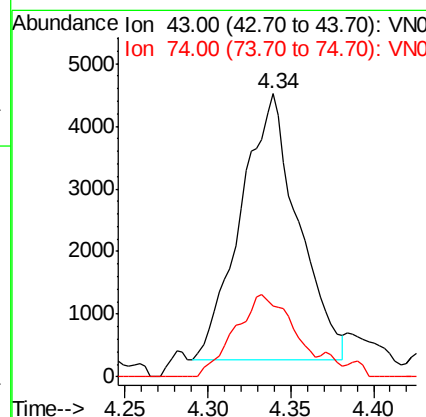
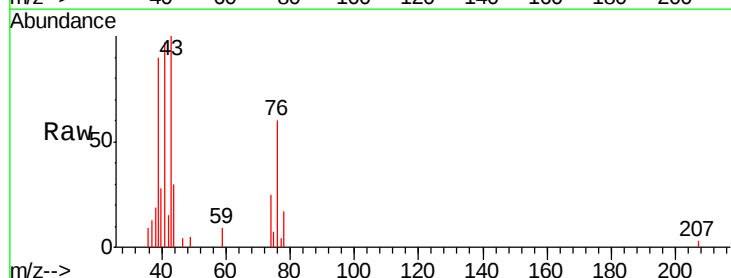
Manual Integrations
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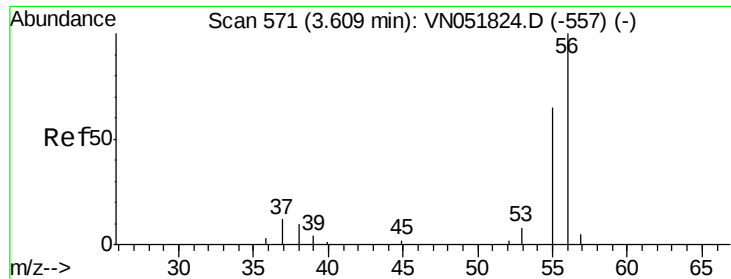
MMDadoda
10/15/2018 11:27:58 AM



#12
Methyl Acetate
Concen: 2.85 ug/l
RT: 4.34 min Scan# 798
Delta R.T. 0.01 min
Lab File: VN051833.D
Acq: 12 Oct 2018 15:26

Tgt Ion	Ratio	Lower	Upper
43	100		
74	25.7	21.8	32.6





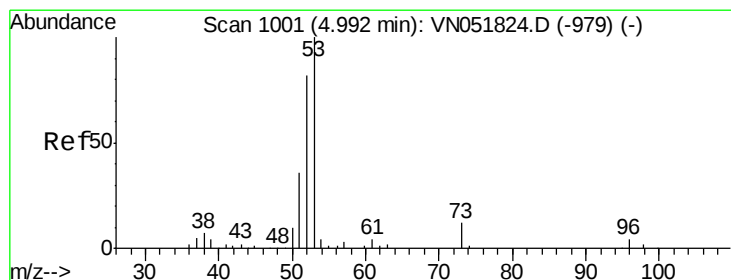
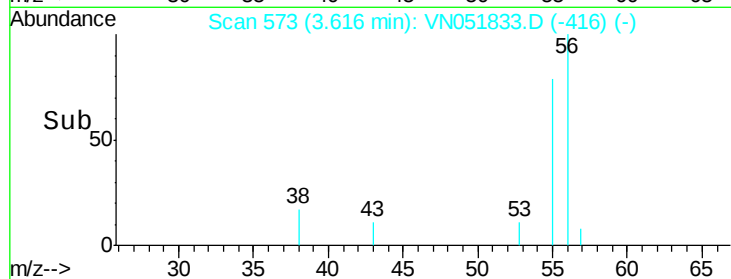
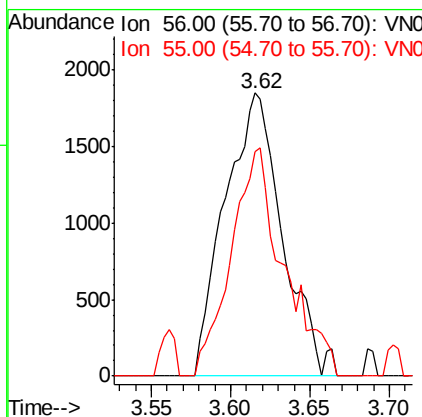
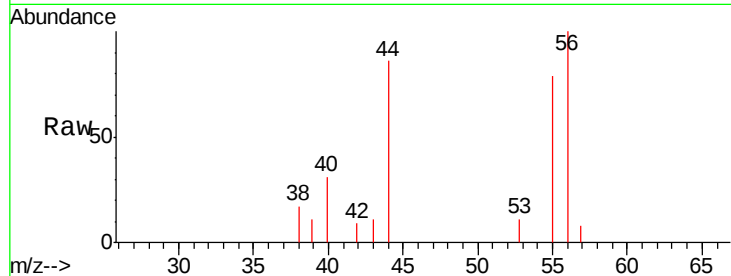
#13
Acrolein
Concen: 19.76 ug/l m
RT: 3.62 min Scan# 573
Delta R.T. 0.01 min
Lab File: VN051833.D
Acq: 12 Oct 2018 15:26

Instrument :
MSVOA_N
ClientSampleId :
MDL-WATER-03-QT4-2018

Tgt Ion: 56 Resp: 4702
Ion Ratio Lower Upper
56 100
55 1.6 64.0 96.0#

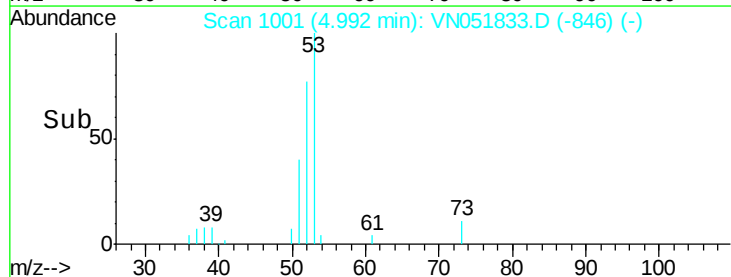
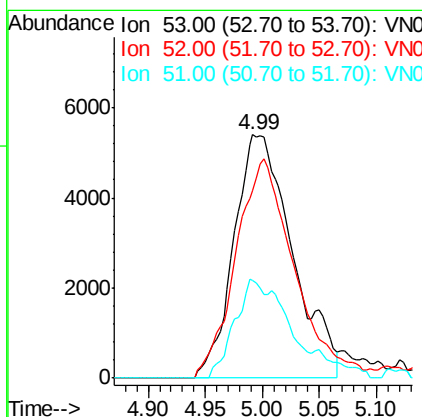
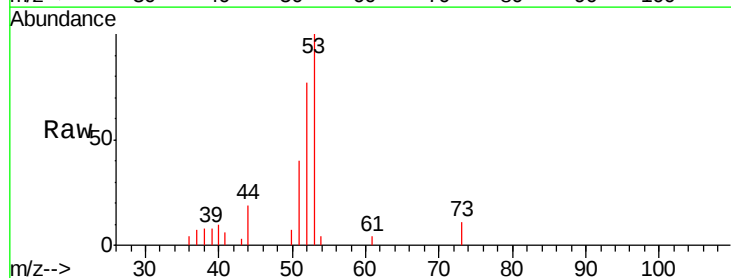
Manual Integrations
APPROVED

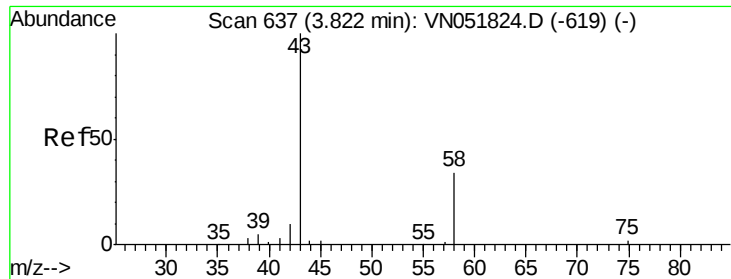
MMDadoda
10/15/2018 11:27:58 AM



#14
Acrylonitrile
Concen: 11.94 ug/l m
RT: 4.99 min Scan# 1001
Delta R.T. -0.00 min
Lab File: VN051833.D
Acq: 12 Oct 2018 15:26

Tgt Ion: 53 Resp: 19269
Ion Ratio Lower Upper
53 100
52 89.6 18.3 54.8#
51 19.7 19.7 59.1





#15

Acetone

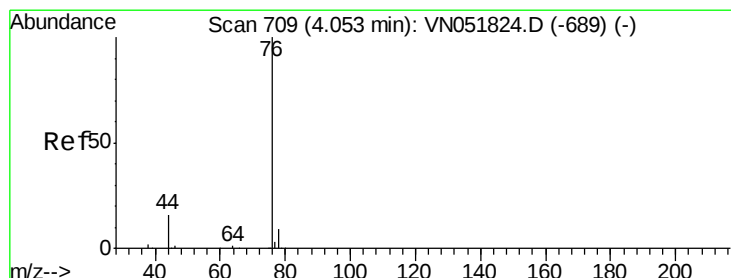
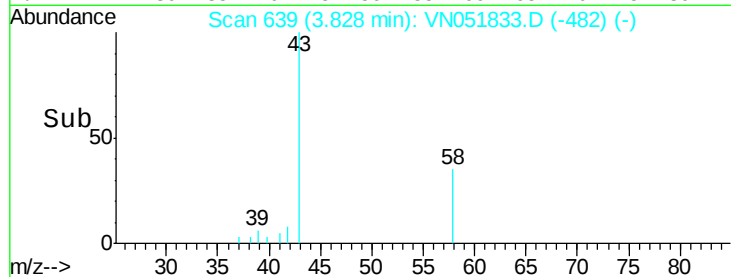
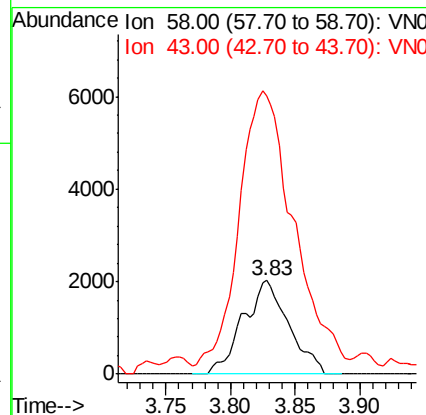
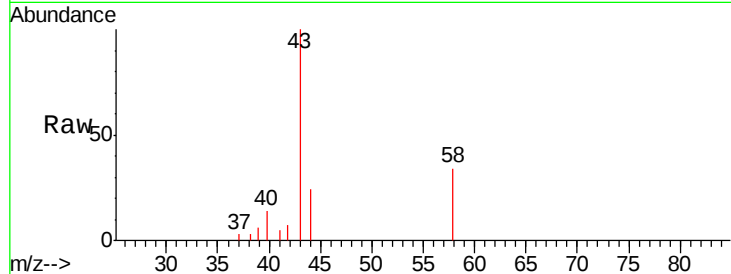
Concen: 12.39 ug/l m
 RT: 3.83 min Scan# 639
 Delta R.T. 0.01 min
 Lab File: VN051833.D
 Acq: 12 Oct 2018 15:26

Instrument :
 MSVOA_N
 ClientSampleId :
 MDL-WATER-03-QT4-2018

Tgt Ion: 58 Resp: 4942
 Ion Ratio Lower Upper
 58 100
 43 297.1 232.2 348.2

Manual Integrations
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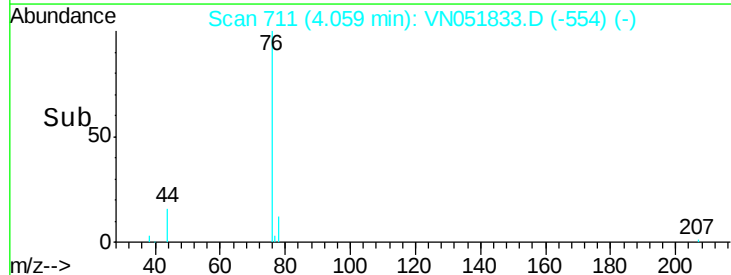
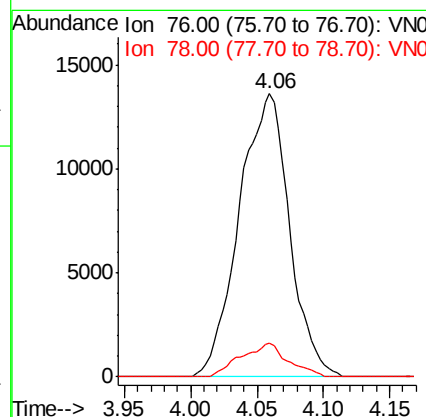
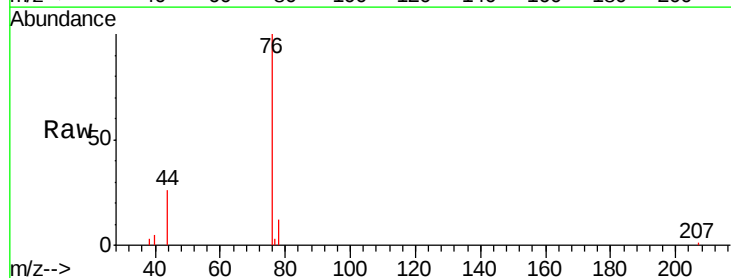


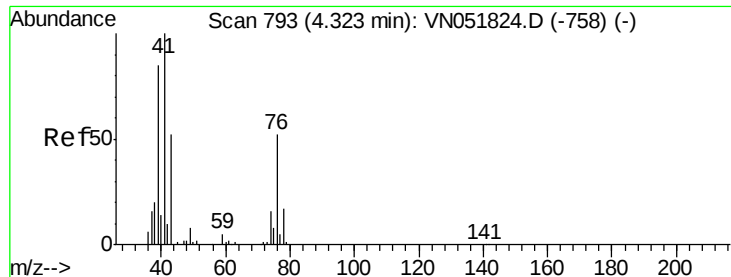
#16

Carbon Disulfide

Concen: 2.35 ug/l
 RT: 4.06 min Scan# 711
 Delta R.T. 0.01 min
 Lab File: VN051833.D
 Acq: 12 Oct 2018 15:26

Tgt Ion: 76 Resp: 35926
 Ion Ratio Lower Upper
 76 100
 78 11.9 6.7 10.1#





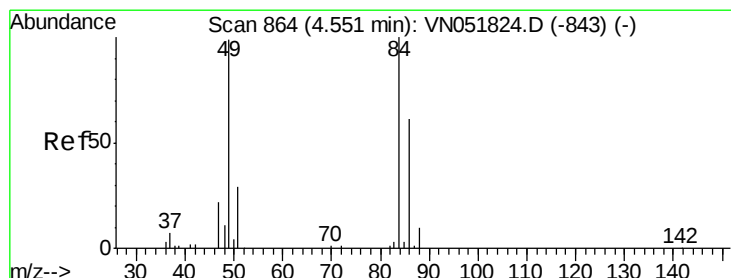
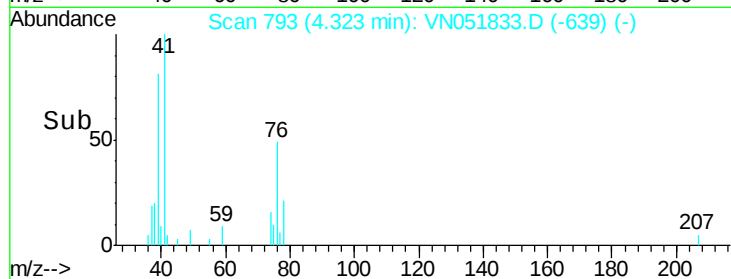
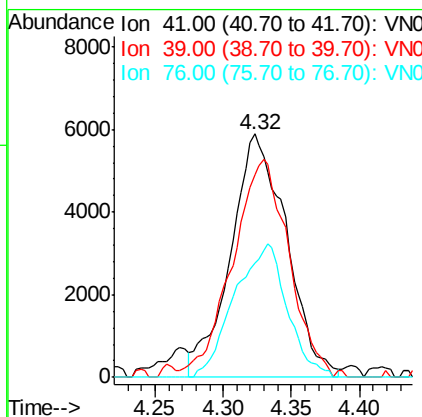
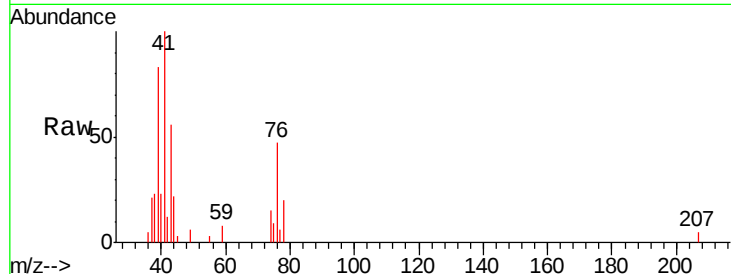
#17
 Allyl chloride
 Concen: 2.43 ug/l
 RT: 4.32 min Scan# 793
 Delta R.T. -0.00 min
 Lab File: VN051833.D
 Acq: 12 Oct 2018 15:26

Instrument :
 MSVOA_N
 ClientSampleId :
 MDL-WATER-03-QT4-2018

Tgt Ion:	41	Resp:	16745
Ion	Ratio	Lower	Upper
41	100		
39	83.0	32.6	97.8
76	48.4	20.2	60.5

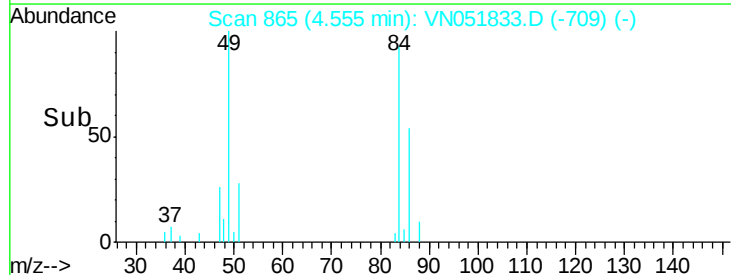
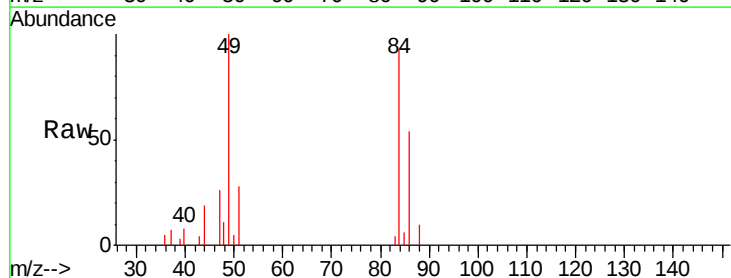
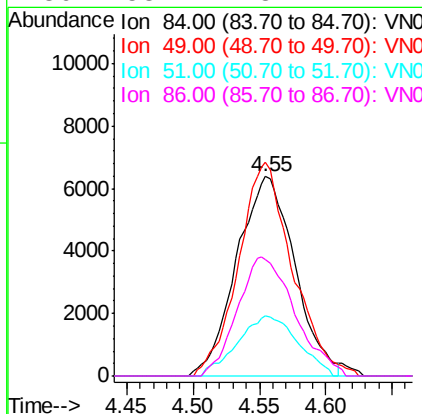
Manual Integrations
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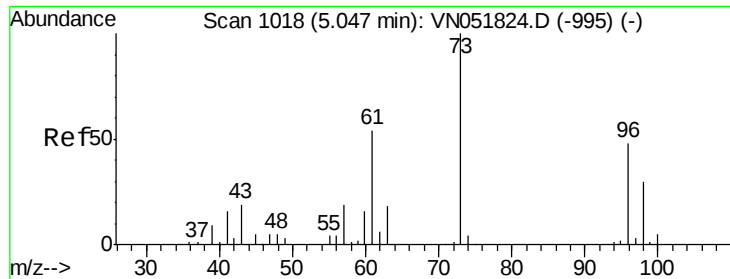
MMDadoda
 10/15/2018 11:27:58 AM



#18
 Methylene Chloride
 Concen: 3.00 ug/l
 RT: 4.55 min Scan# 865
 Delta R.T. 0.00 min
 Lab File: VN051833.D
 Acq: 12 Oct 2018 15:26

Tgt Ion:	84	Resp:	19486
Ion	Ratio	Lower	Upper
84	100		
49	107.3	91.6	137.4
51	30.4	29.8	44.6
86	58.4	48.2	72.4





#19

trans-1,2-Dichloroethene

Concen: 2.81 ug/l

RT: 5.04 min Scan# 1017

Delta R.T. -0.00 min

Lab File: VN051833.D

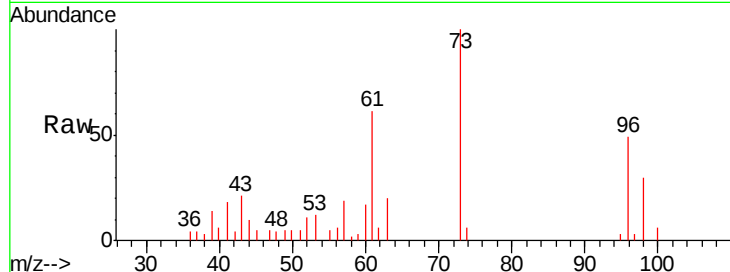
Acq: 12 Oct 2018 15:26

Instrument :
MSVOA_N
ClientSampleId :
MDL-WATER-03-QT4-2018

Tgt Ion	Ratio	Lower	Upper
96	100		
61	120.0	112.3	168.5
98	61.7	47.1	70.7

Manual Integrations
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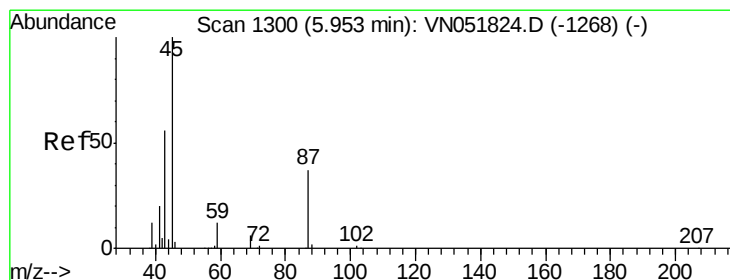
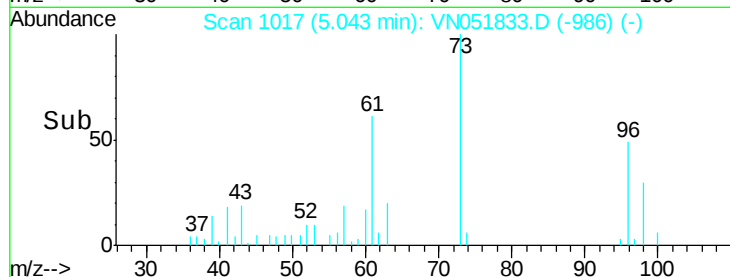
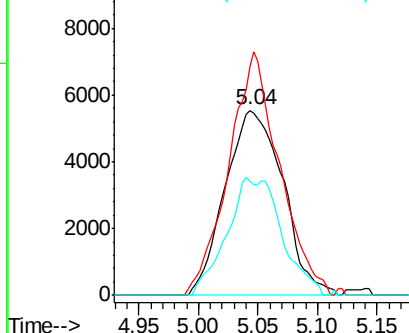


Abundance

Ion 96.00 (95.70 to 96.70): VN0

Ion 61.00 (60.70 to 61.70): VN0

Ion 98.00 (97.70 to 98.70): VN0



#20

Diisopropyl ether

Concen: 2.70 ug/l

RT: 5.96 min Scan# 1302

Delta R.T. 0.00 min

Lab File: VN051833.D

Acq: 12 Oct 2018 15:26

Tgt Ion	Ratio	Lower	Upper
45	100		
43	66.2	62.1	93.1
87	36.9	19.9	29.9
59	13.2	9.8	14.6

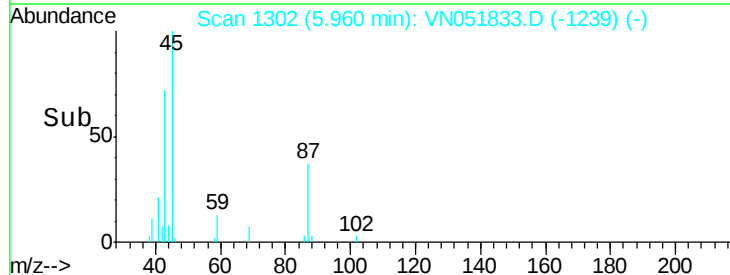
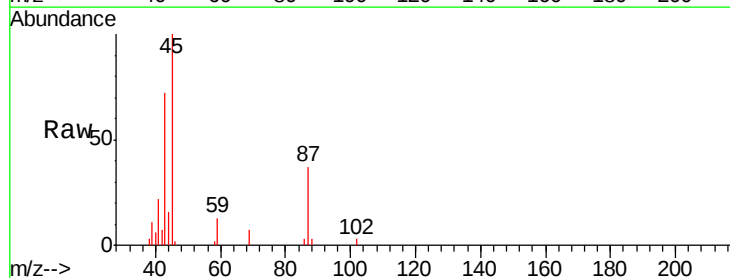
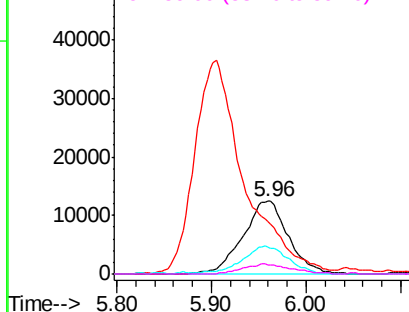
Abundance

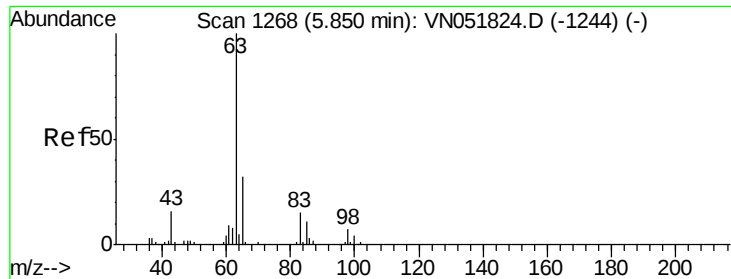
Ion 45.00 (44.70 to 45.70): VN0

Ion 43.00 (42.70 to 43.70): VN0

Ion 87.00 (86.70 to 87.70): VN0

Ion 59.00 (58.70 to 59.70): VN0





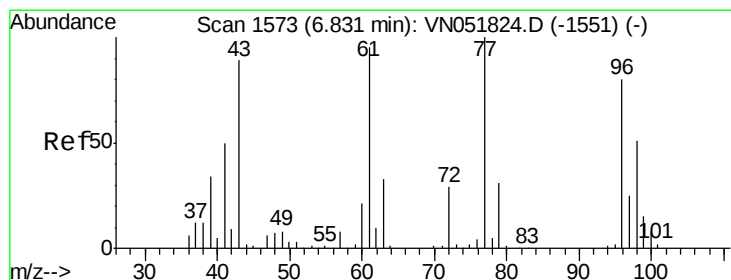
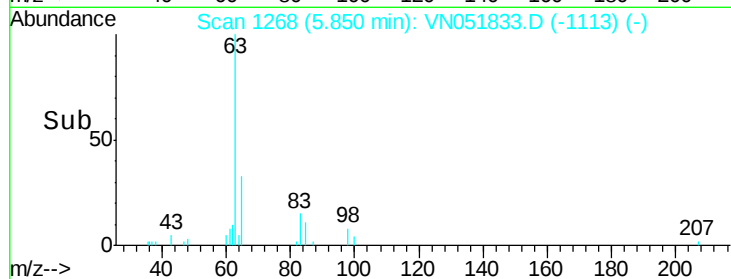
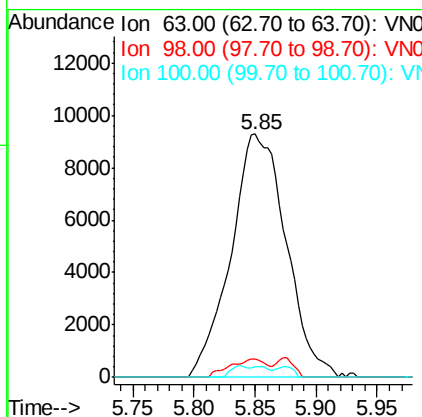
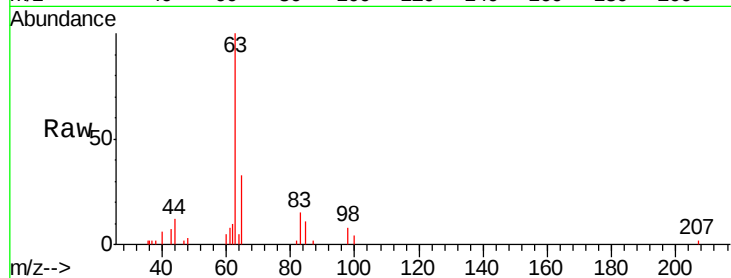
#21
 1,1-Dichloroethane
 Concen: 2.71 ug/l
 RT: 5.85 min Scan# 1268
 Delta R.T. -0.00 min
 Lab File: VN051833.D
 Acq: 12 Oct 2018 15:26

Instrument :
 MSVOA_N
 ClientSampleId :
 MDL-WATER-03-QT4-2018

Tgt Ion	Ratio	Resp	Lower	Upper
63	100	29122		
98	7.6	4.1	12.3	
100	4.4	1.6	4.7	

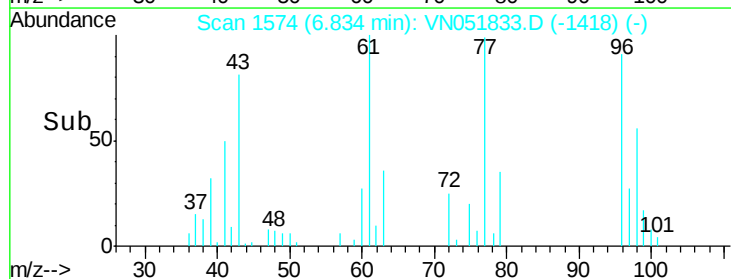
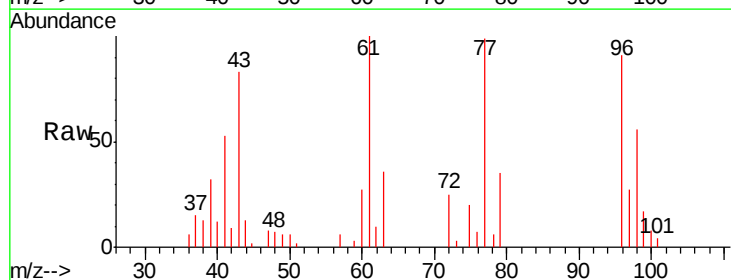
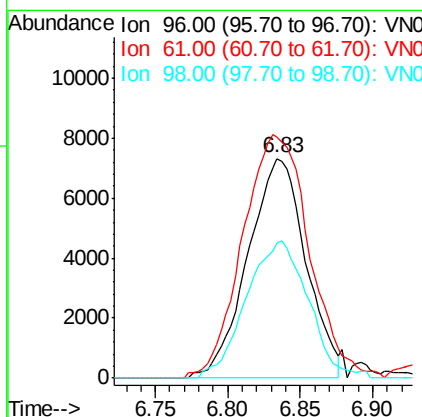
Manual Integrations
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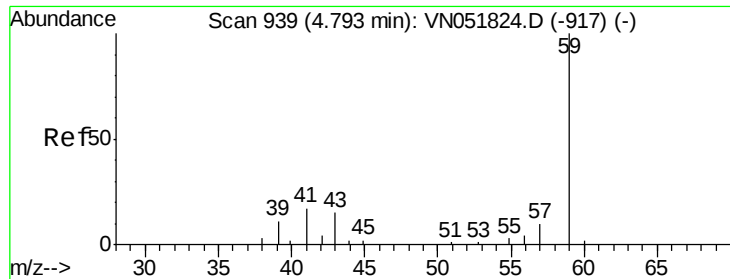
MMDadoda
 10/15/2018 11:27:58 AM



#22
 cis-1,2-Dichloroethene
 Concen: 2.60 ug/l
 RT: 6.83 min Scan# 1574
 Delta R.T. 0.00 min
 Lab File: VN051833.D
 Acq: 12 Oct 2018 15:26

Tgt Ion	Ratio	Resp	Lower	Upper
96	100	20306		
61	127.2	124.5	186.7	
98	66.5	51.9	77.9	





#23

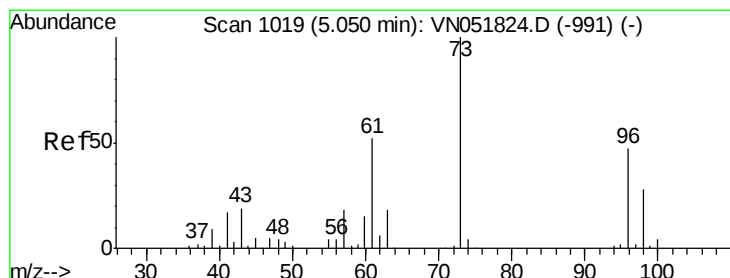
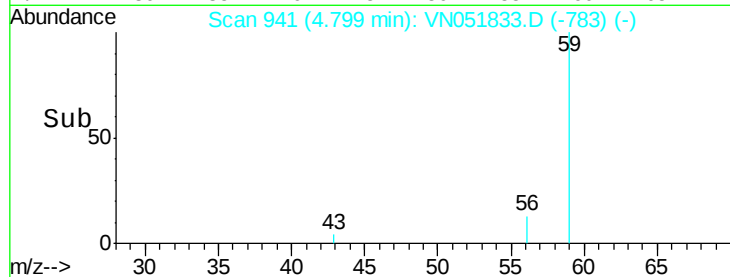
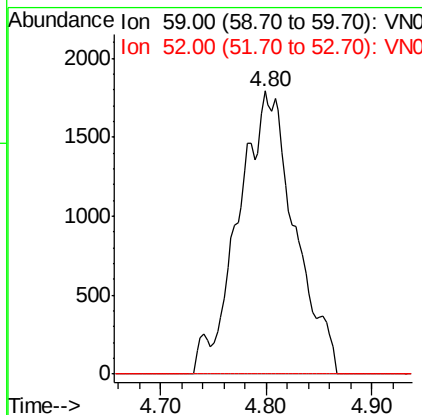
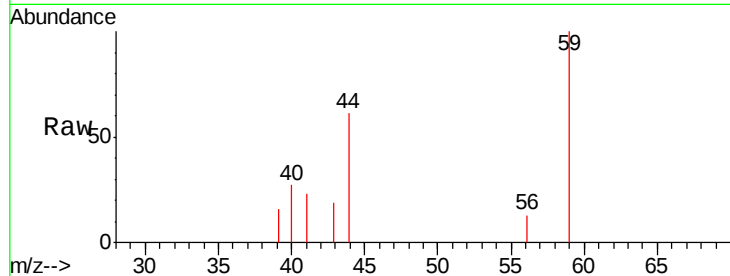
tert-Butyl Alcohol
Concen: 15.68 ug/l m
RT: 4.80 min Scan# 941
Delta R.T. 0.01 min
Lab File: VN051833.D
Acq: 12 Oct 2018 15:26

Instrument :
MSVOA_N
ClientSampleId :
MDL-WATER-03-QT4-2018

Tgt Ion: 59 Resp: 6664
Ion Ratio Lower Upper
59 100
52 0.0 0.0 0.0

Manual Integrations
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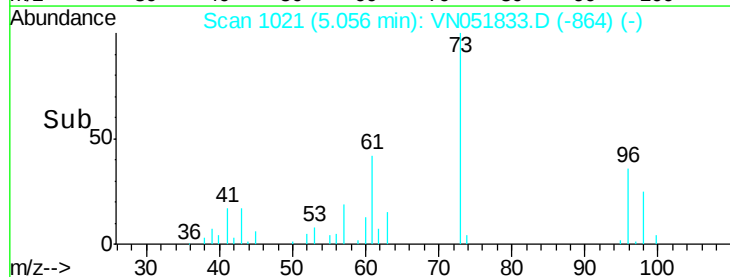
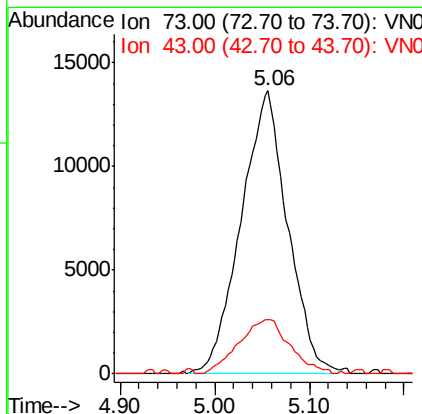
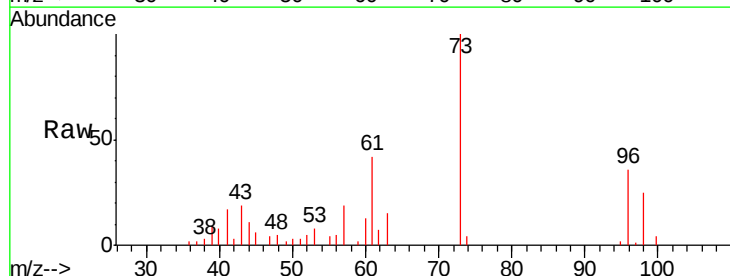
MMDadoda
10/15/2018 11:27:58 AM

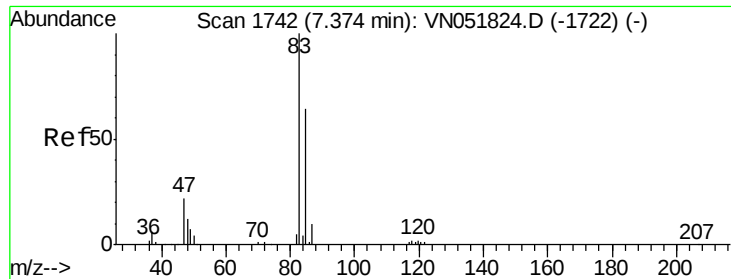


#24

Methyl tert-Butyl Ether
Concen: 2.79 ug/l
RT: 5.06 min Scan# 1021
Delta R.T. 0.01 min
Lab File: VN051833.D
Acq: 12 Oct 2018 15:26

Tgt Ion: 73 Resp: 46786
Ion Ratio Lower Upper
73 100
43 20.4 5.4 8.0#





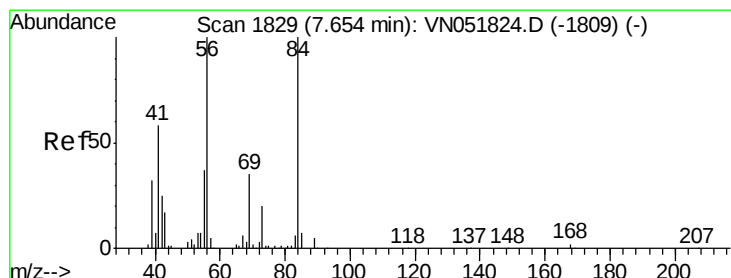
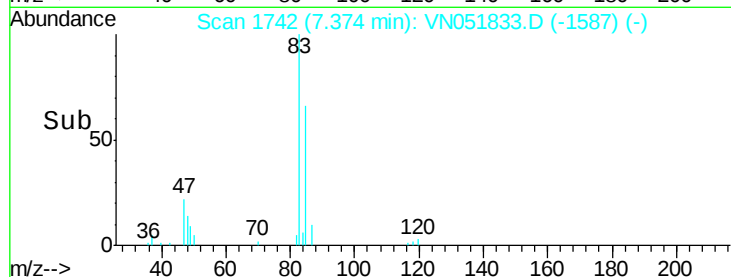
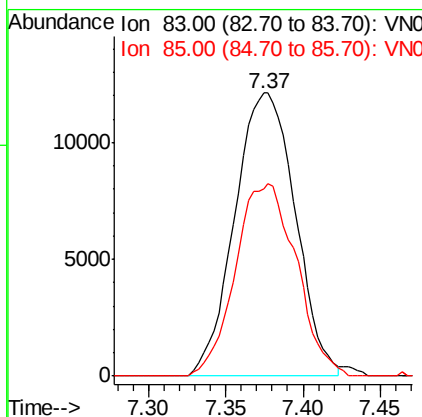
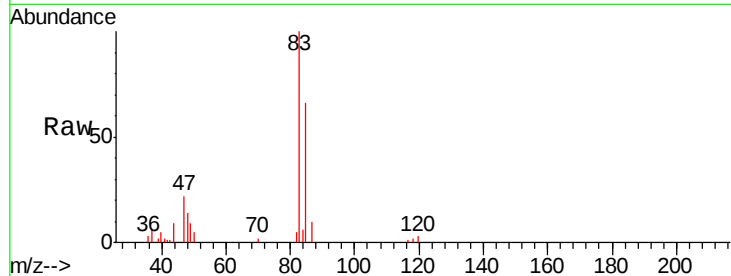
#25
Chloroform
Concen: 2.59 ug/l
RT: 7.37 min Scan# 1742
Delta R.T. -0.00 min
Lab File: VN051833.D
Acq: 12 Oct 2018 15:26

Instrument :
MSVOA_N
ClientSampleId :
MDL-WATER-03-QT4-2018

Tgt Ion	Ratio	Lower	Upper
83	100		
85	66.0	54.6	82.0

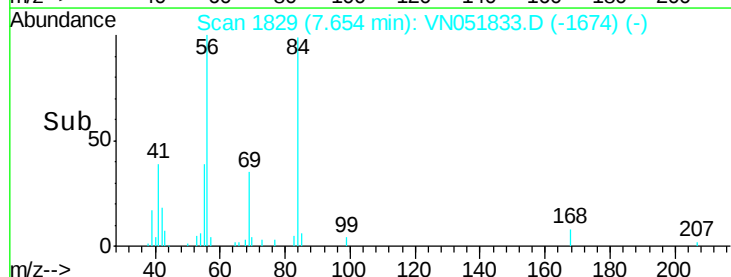
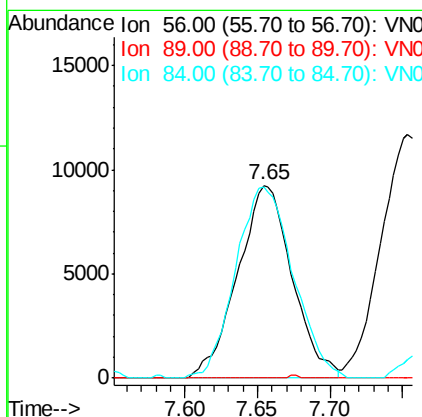
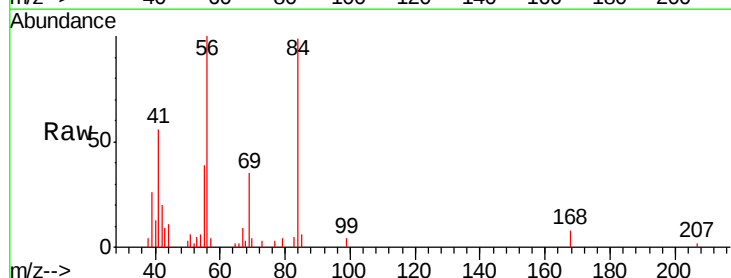
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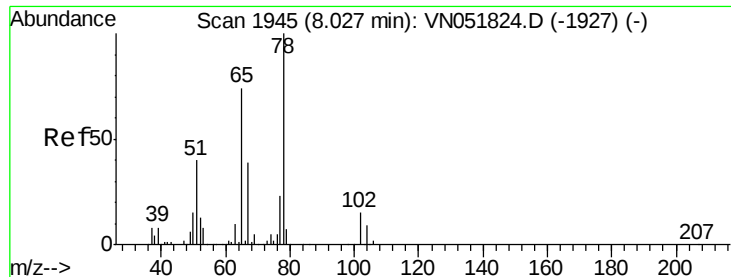
MMDadoda
10/15/2018 11:27:58 AM



#26
Cyclohexane
Concen: 2.65 ug/l
RT: 7.65 min Scan# 1829
Delta R.T. -0.00 min
Lab File: VN051833.D
Acq: 12 Oct 2018 15:26

Tgt Ion	Ratio	Lower	Upper
56	100		
89	0.2	1.5	2.3#
84	104.7	64.2	96.4#





#27

1,2-Dichloroethane-d4

Concen: 2.65 ug/l

RT: 8.03 min Scan# 1946

Delta R.T. 0.00 min

Lab File: VN051833.D

Acq: 12 Oct 2018 15:26

Instrument :

MSVOA_N

ClientSampleId :

MDL-WATER-03-QT4-2018

Tgt Ion: 65 Resp: 242078

Ion Ratio Lower Upper

65 100

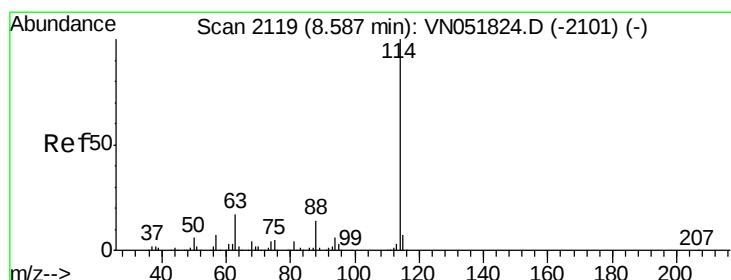
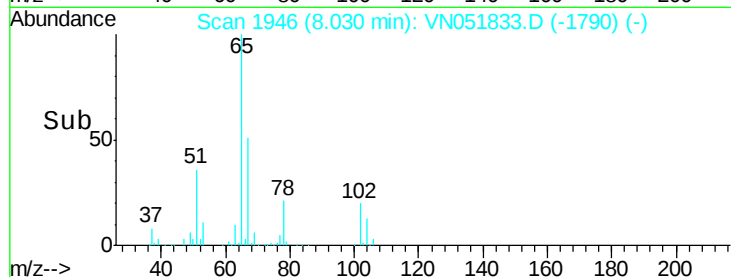
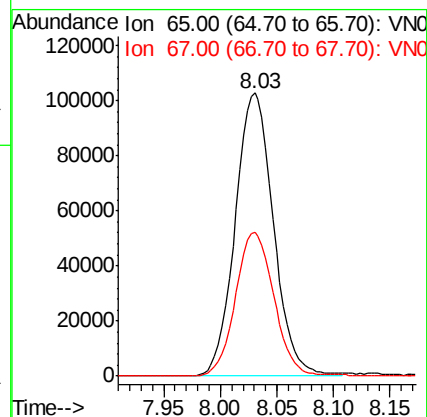
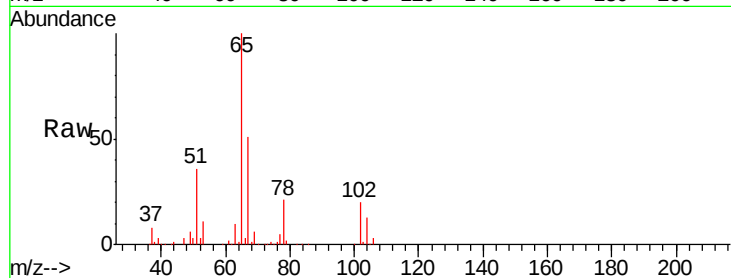
67 51.2 41.8 62.8

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#28

1,4-Difluorobenzene

Concen: 30.00 ug/l

RT: 8.59 min Scan# 2119

Delta R.T. -0.00 min

Lab File: VN051833.D

Acq: 12 Oct 2018 15:26

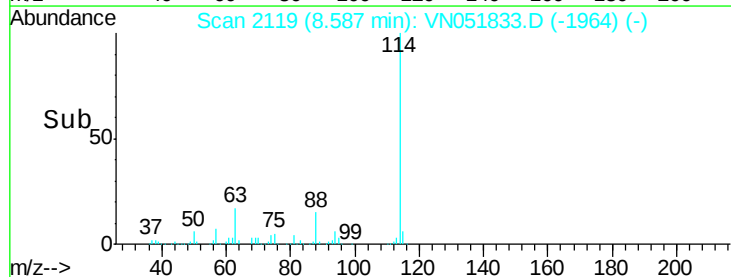
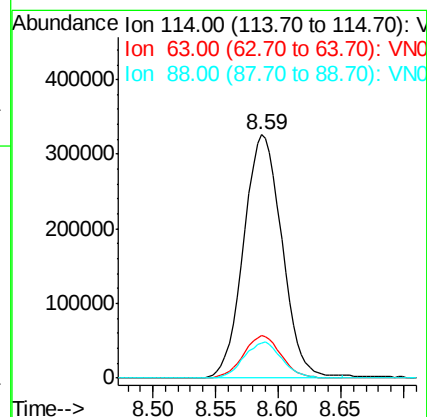
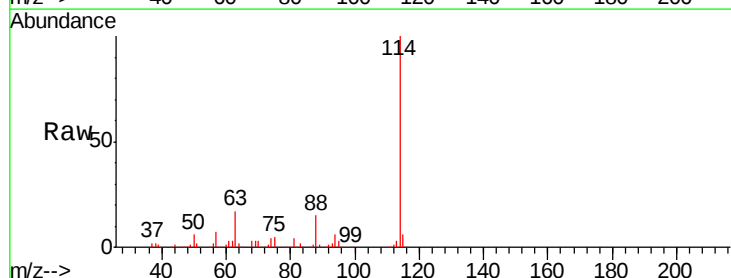
Tgt Ion: 114 Resp: 695401

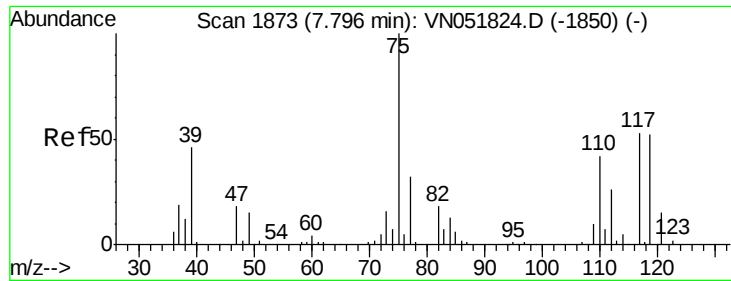
Ion Ratio Lower Upper

114 100

63 17.2 16.2 24.2

88 14.6 12.2 18.4





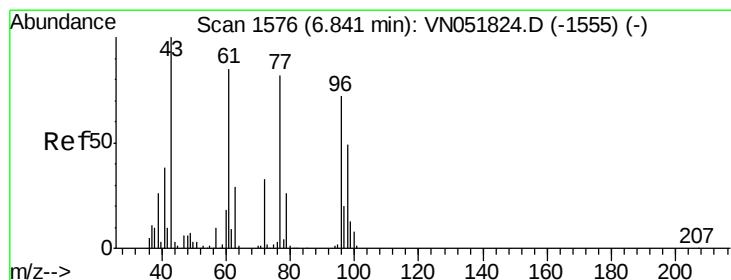
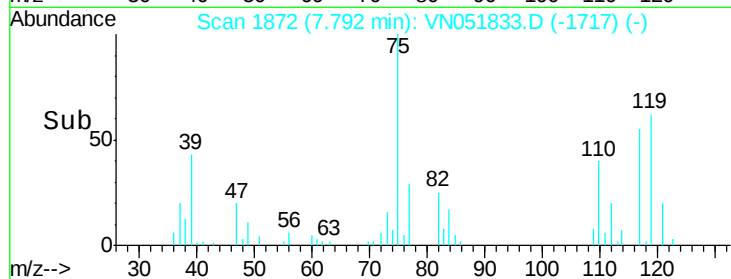
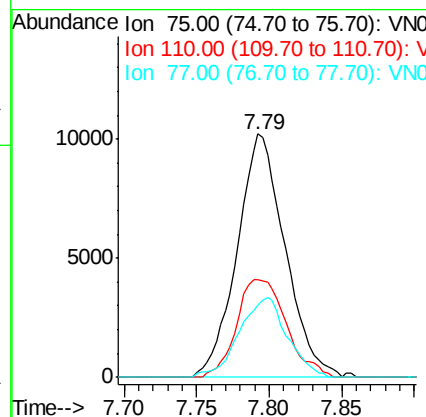
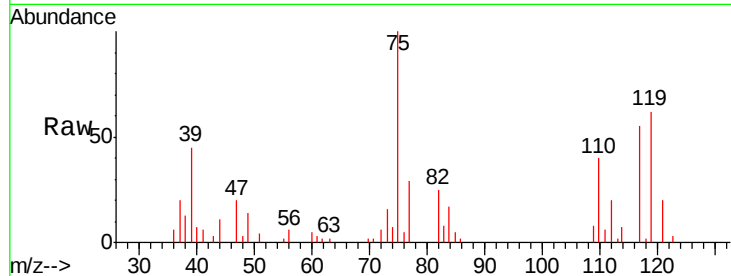
#29
 1,1-Dichloropropene
 Concen: 2.62 ug/l
 RT: 7.79 min Scan# 1872
 Delta R.T. -0.00 min
 Lab File: VN051833.D
 Acq: 12 Oct 2018 15:26

Instrument :
 MSVOA_N
 ClientSampleId :
 MDL-WATER-03-QT4-2018

Tgt Ion	Ratio	Resp Lower	Upper
75	100		
110	41.8	0.0	70.8
77	32.6	0.0	61.6

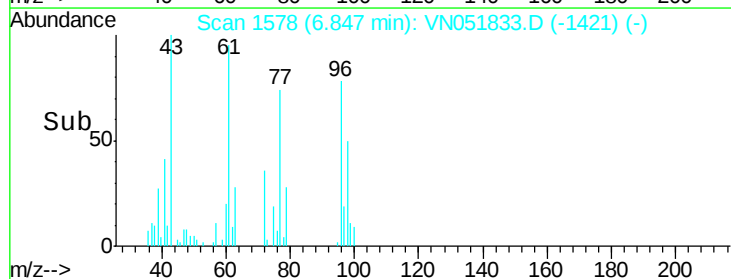
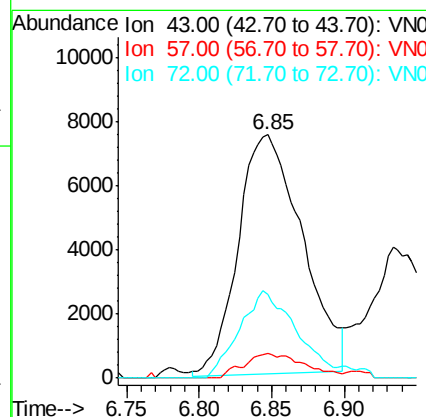
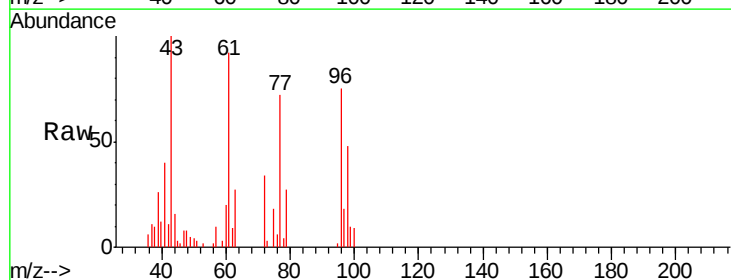
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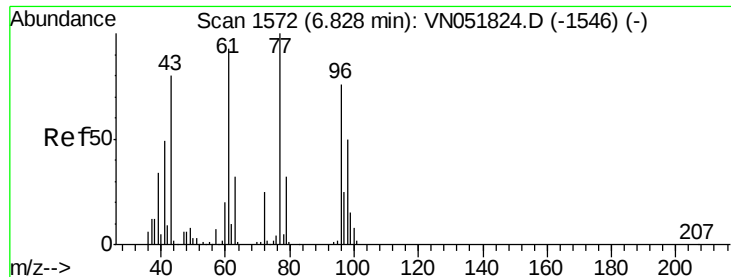
MMDadoda
 10/15/2018 11:27:58 AM



#30
 2-Butanone
 Concen: 12.23 ug/l
 RT: 6.85 min Scan# 1578
 Delta R.T. 0.01 min
 Lab File: VN051833.D
 Acq: 12 Oct 2018 15:26

Tgt Ion	Ratio	Resp Lower	Upper
43	100		
57	2.4	4.5	6.7#
72	32.4	21.5	32.3#





#31

2,2-Dichloropropane

Concen: 2.44 ug/l

RT: 6.83 min Scan# 1572

Delta R.T. -0.00 min

Lab File: VN051833.D

Acq: 12 Oct 2018 15:26

Instrument :

MSVOA_N

ClientSampleId :

MDL-WATER-03-QT4-2018

Tgt Ion: 77 Resp: 25754

Ion Ratio Lower Upper

77 100

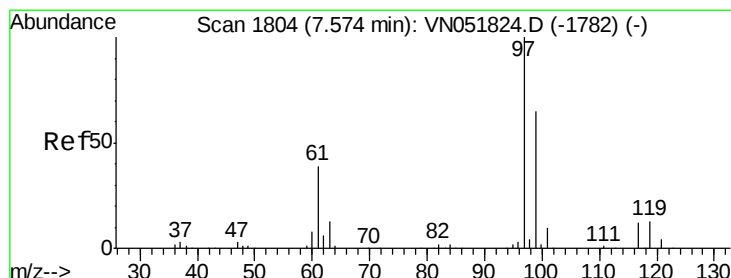
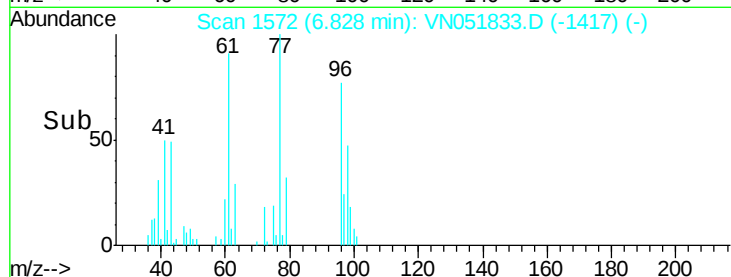
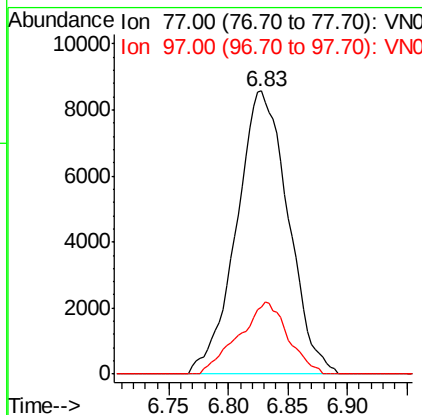
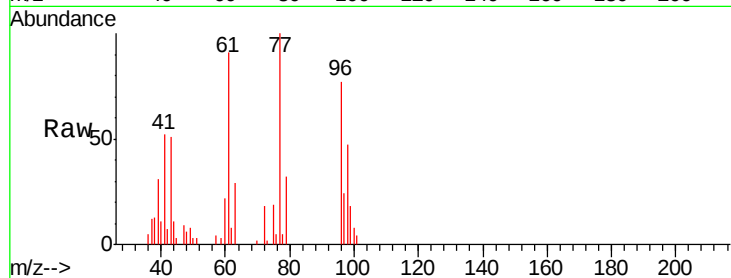
97 24.3 12.0 18.0#

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#32

1,1,1-Trichloroethane

Concen: 2.63 ug/l

RT: 7.57 min Scan# 1803

Delta R.T. -0.00 min

Lab File: VN051833.D

Acq: 12 Oct 2018 15:26

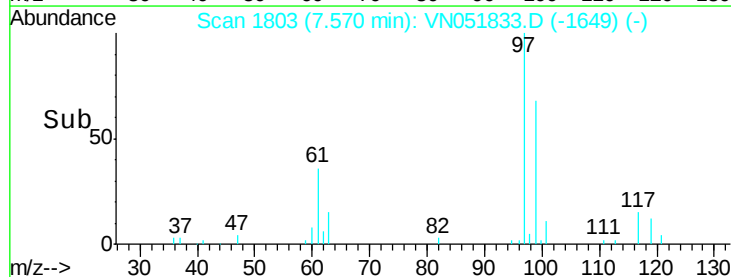
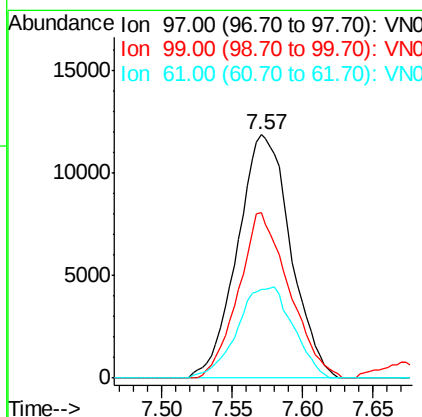
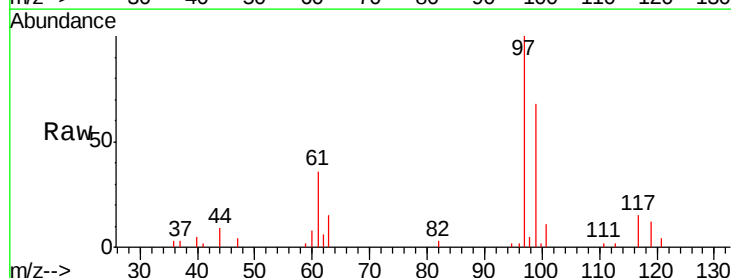
Tgt Ion: 97 Resp: 31257

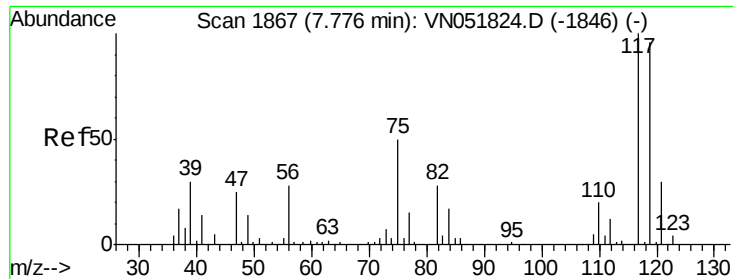
Ion Ratio Lower Upper

97 100

99 64.7 51.6 77.4

61 39.0 37.4 56.0





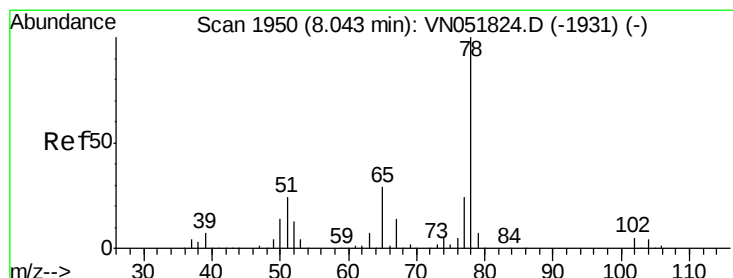
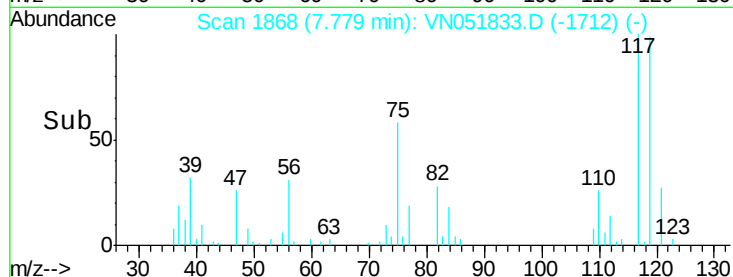
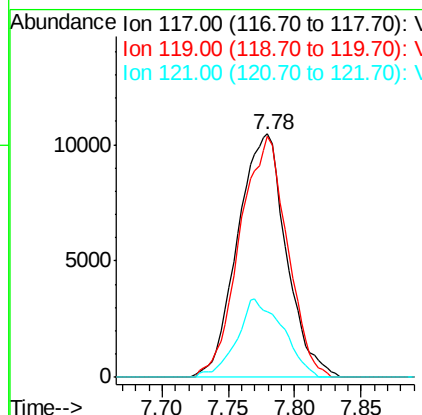
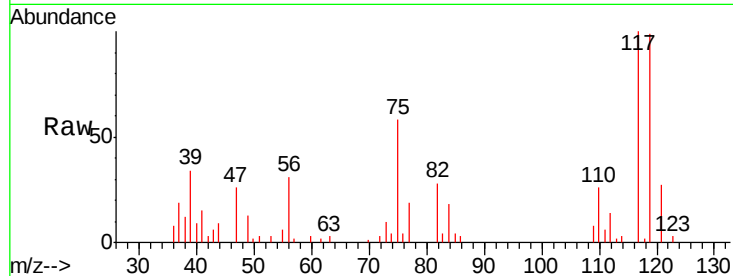
#33
Carbon Tetrachloride
Concen: 2.48 ug/l
RT: 7.78 min Scan# 1868
Delta R.T. 0.00 min
Lab File: VN051833.D
Acq: 12 Oct 2018 15:26

Instrument :
MSVOA_N
ClientSampleId :
MDL-WATER-03-QT4-2018

Tgt Ion: 117 Resp: 26658
Ion Ratio Lower Upper
117 100
119 98.8 85.1 127.7
121 27.1 24.2 36.2

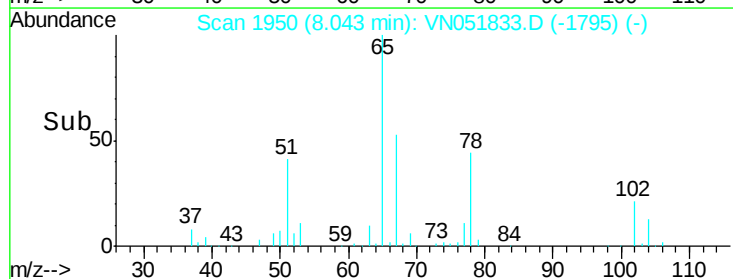
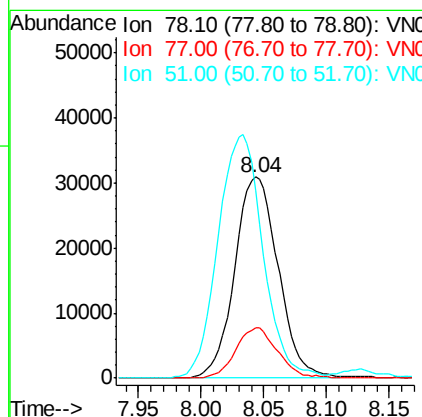
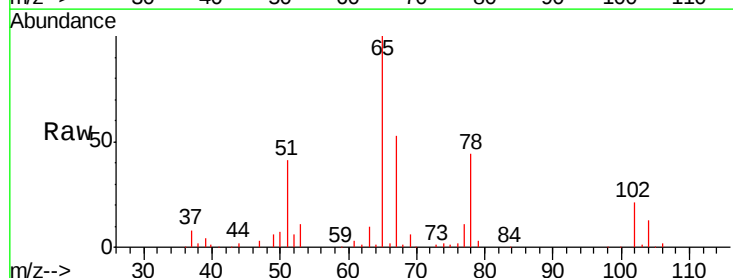
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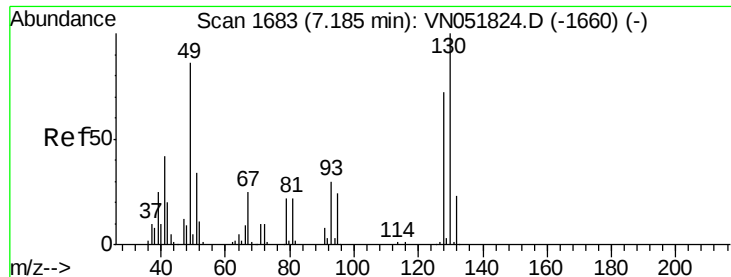
MMDadoda
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#34
Benzene
Concen: 2.81 ug/l
RT: 8.04 min Scan# 1950
Delta R.T. -0.00 min
Lab File: VN051833.D
Acq: 12 Oct 2018 15:26

Tgt Ion: 78 Resp: 74634
Ion Ratio Lower Upper
78 100
77 25.1 18.8 28.2
51 90.5 46.2 69.4#





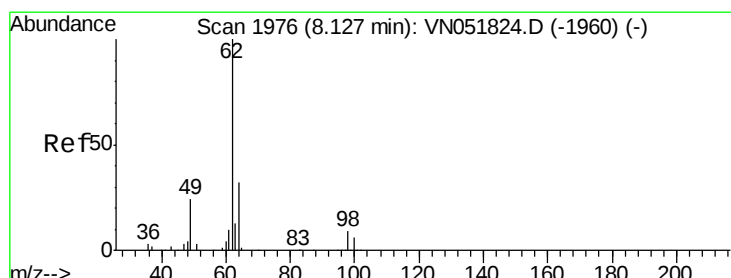
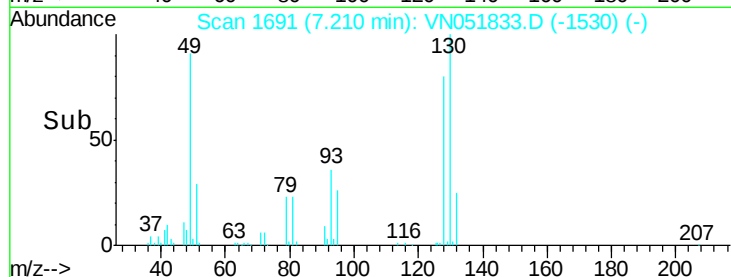
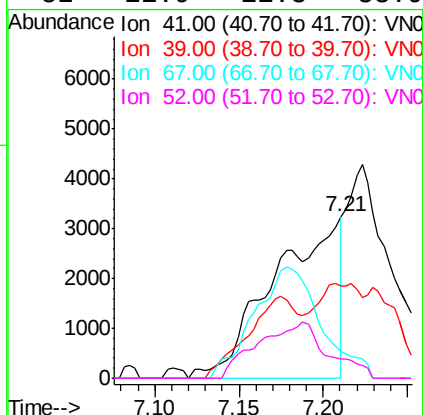
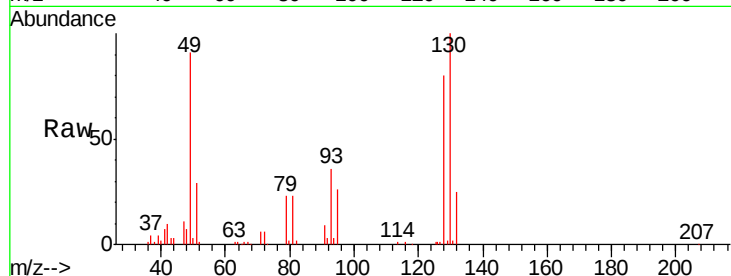
#35
Methacrylonitrile
Concen: 3.63 ug/l m
RT: 7.21 min Scan# 1691
Delta R.T. 0.02 min
Lab File: VN051833.D
Acq: 12 Oct 2018 15:26

Instrument :
MSVOA_N
ClientSampleId :
MDL-WATER-03-QT4-2018

Tgt Ion	Ratio	Lower	Upper
41	100		
39	56.6	22.6	67.7
67	16.6	28.9	86.8#
52	11.9	11.3	33.9

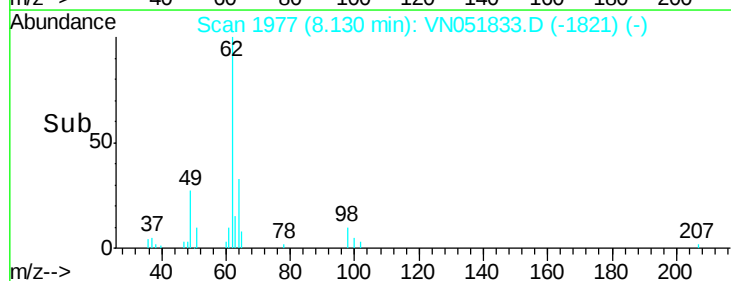
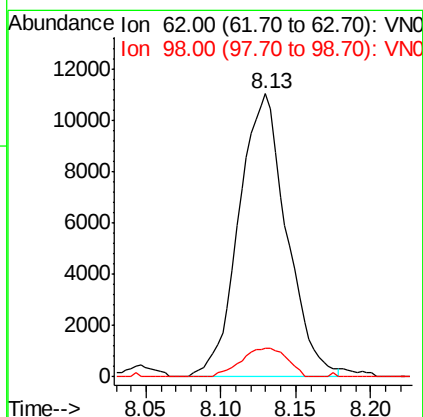
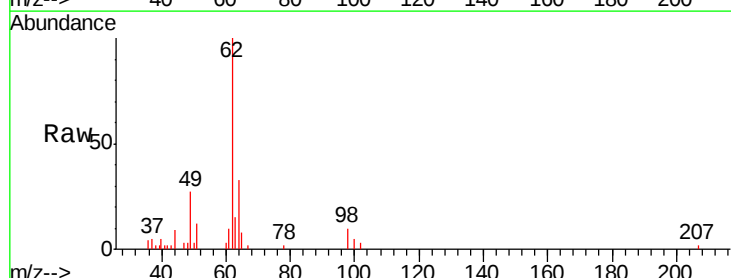
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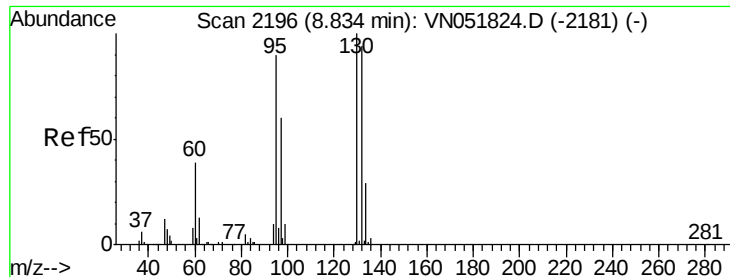
MMDadoda
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#36
1,2-Dichloroethane
Concen: 2.88 ug/l
RT: 8.13 min Scan# 1977
Delta R.T. 0.00 min
Lab File: VN051833.D
Acq: 12 Oct 2018 15:26

Tgt Ion	Ratio	Lower	Upper
62	100		
98	9.9	6.9	10.3





#37

Trichloroethene

Concen: 2.65 ug/l

RT: 8.83 min Scan# 2196

Delta R.T. -0.00 min

Lab File: VN051833.D

Acq: 12 Oct 2018 15:26

Instrument :

MSVOA_N

ClientSampleId :

MDL-WATER-03-QT4-2018

Tgt Ion: 130 Resp: 21829

Ion Ratio Lower Upper

130 100

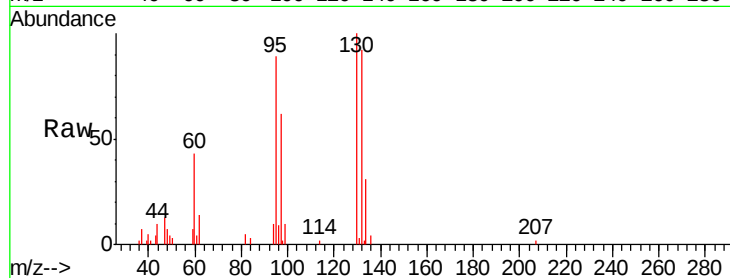
95 89.3 76.4 114.6

Manual Integrations

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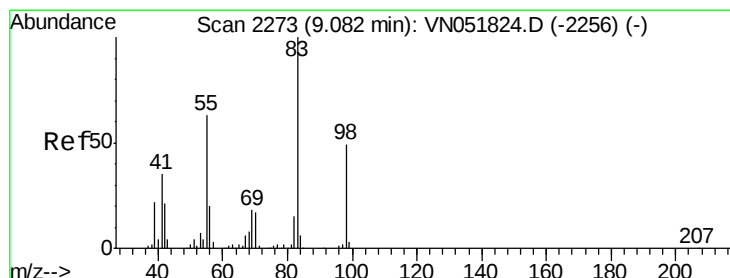
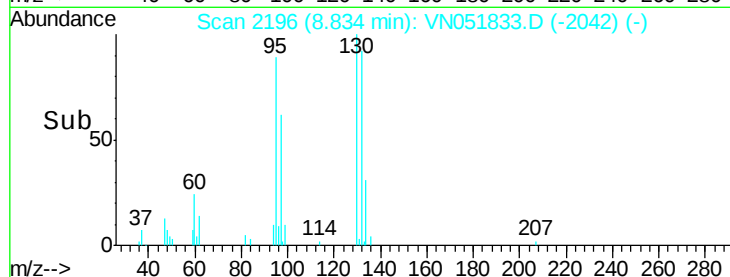
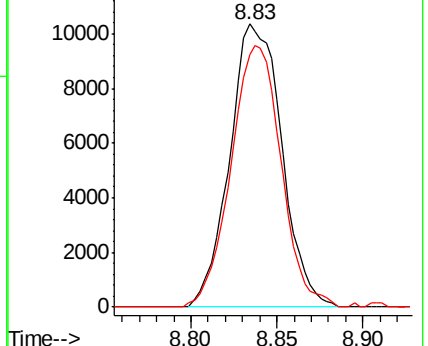
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Abundance Ion 129.90 (129.60 to 130.60): V

Ion 94.90 (94.60 to 95.60): VN



#38

Methylcyclohexane

Concen: 2.54 ug/l

RT: 9.08 min Scan# 2272

Delta R.T. -0.00 min

Lab File: VN051833.D

Acq: 12 Oct 2018 15:26

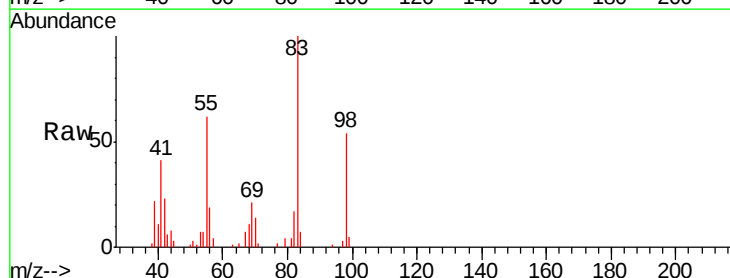
Tgt Ion: 83 Resp: 29231

Ion Ratio Lower Upper

83 100

55 67.0 43.0 129.2

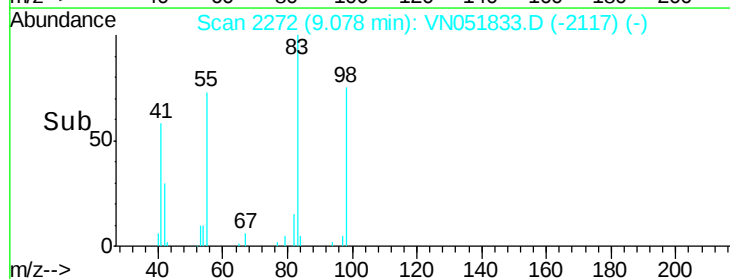
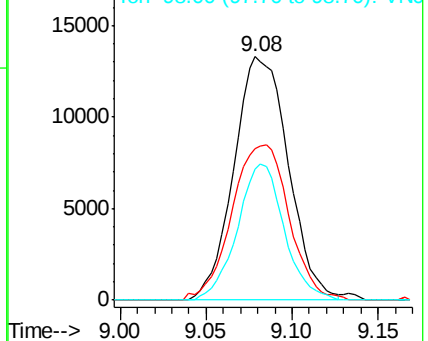
98 48.1 21.3 63.7

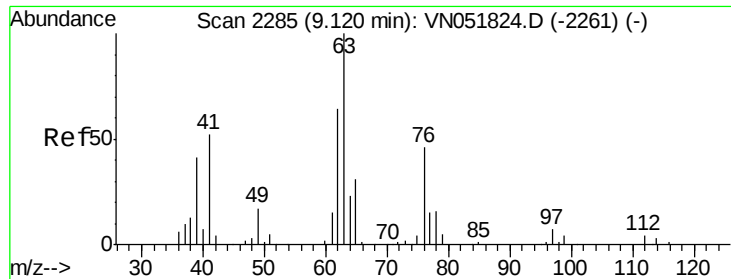


Abundance Ion 83.00 (82.70 to 83.70): VN

Ion 55.00 (54.70 to 55.70): VN

Ion 98.00 (97.70 to 98.70): VN





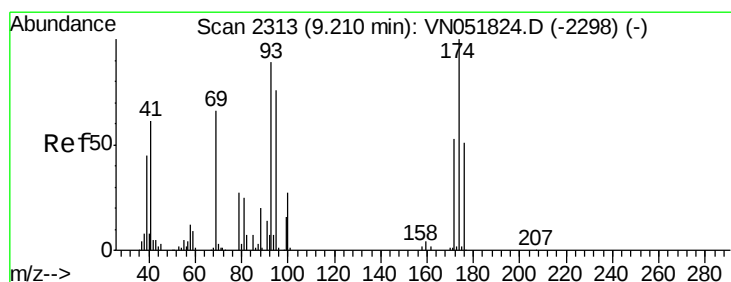
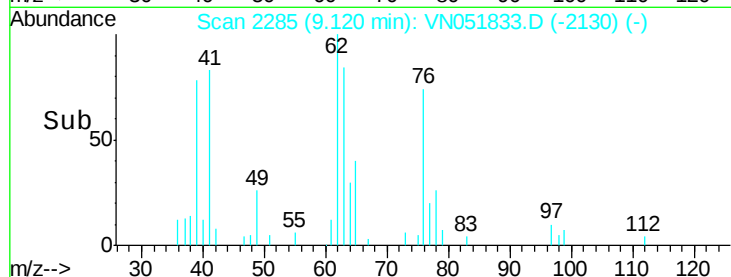
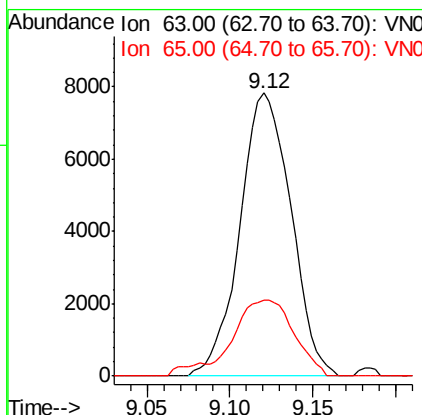
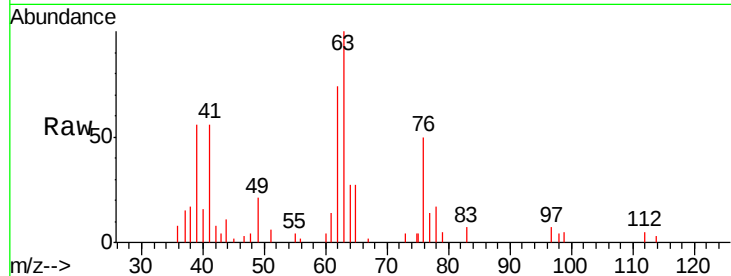
#39
 1,2-Dichloropropane
 Concen: 2.69 ug/l
 RT: 9.12 min Scan# 2285
 Delta R.T. -0.00 min
 Lab File: VN051833.D
 Acq: 12 Oct 2018 15:26

Instrument :
 MSVOA_N
 ClientSampleId :
 MDL-WATER-03-QT4-2018

Tgt Ion: 63 Resp: 16793
 Ion Ratio Lower Upper
 63 100
 65 26.8 23.2 34.8

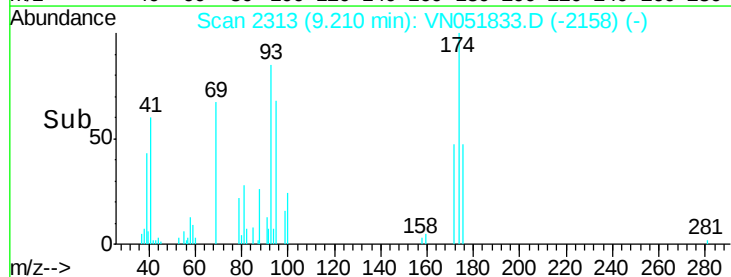
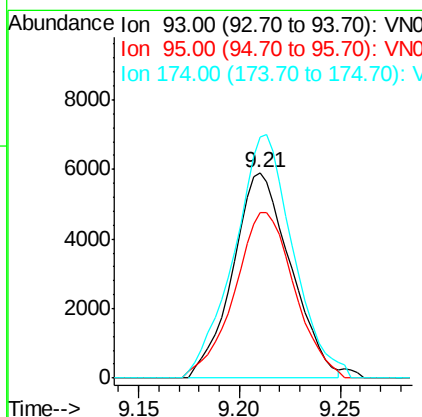
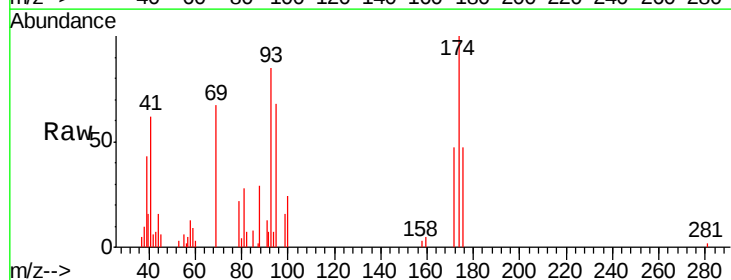
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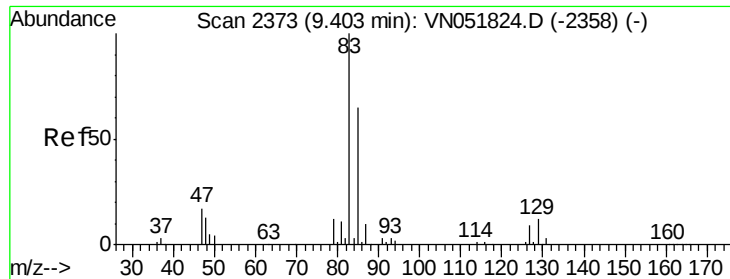
MMDadoda
 10/15/2018 11:27:58 AM



#40
 Dibromomethane
 Concen: 2.56 ug/l
 RT: 9.21 min Scan# 2313
 Delta R.T. -0.00 min
 Lab File: VN051833.D
 Acq: 12 Oct 2018 15:26

Tgt Ion: 93 Resp: 11853
 Ion Ratio Lower Upper
 93 100
 95 83.4 0.0 162.0
 174 120.5 0.0 214.0





#41

Bromodichloromethane

Concen: 2.40 ug/l

RT: 9.40 min Scan# 2373

Delta R.T. -0.00 min

Lab File: VN051833.D

Acq: 12 Oct 2018 15:26

Instrument :

MSVOA_N

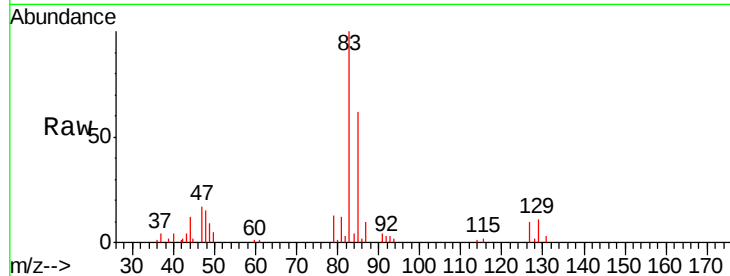
ClientSampleId :

MDL-WATER-03-QT4-2018

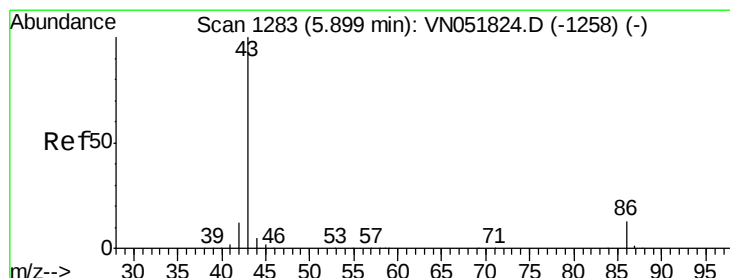
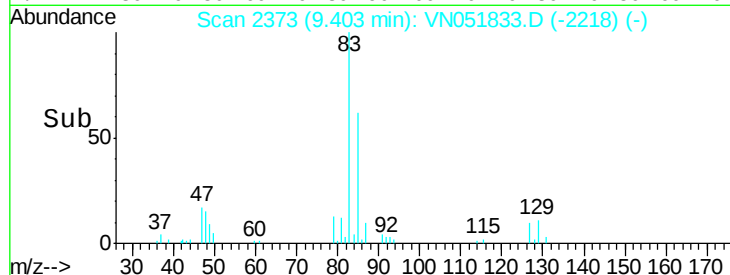
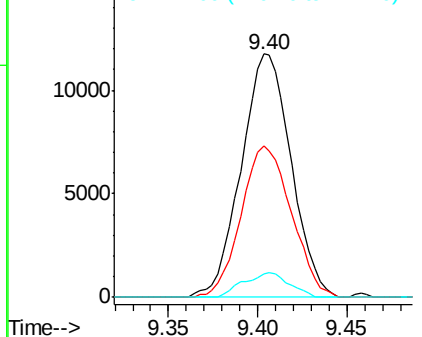
Tgt Ion:	83	Resp:	22946
Ion	Ratio	Lower	Upper
83	100		
85	62.0	55.7	83.5
127	9.7	8.2	12.4

Manual Integrations
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MMDadoda
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Abundance Ion 83.00 (82.70 to 83.70): VN051833.D (-2218) (-)



#42

Vinyl Acetate

Concen: 12.69 ug/l

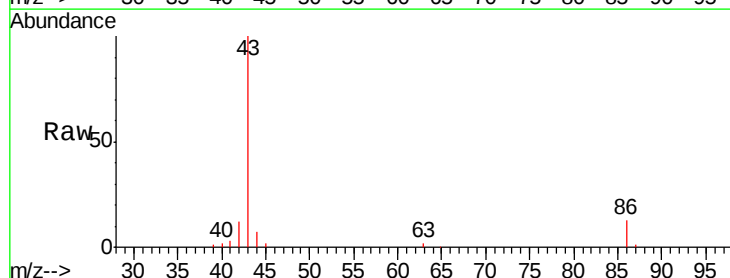
RT: 5.90 min Scan# 1285

Delta R.T. 0.01 min

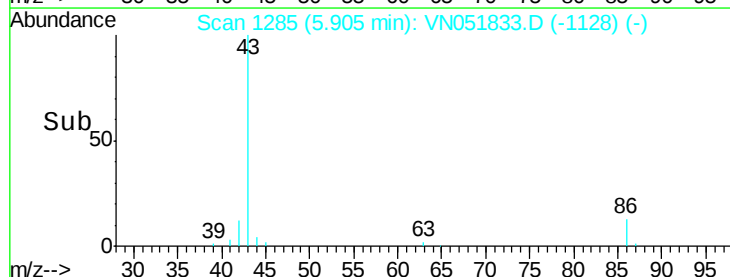
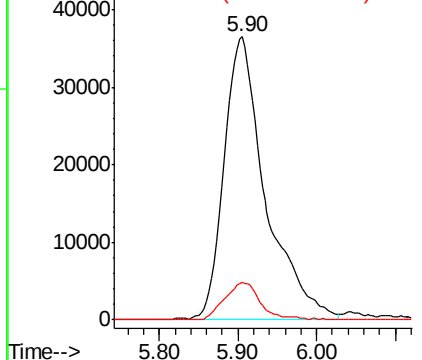
Lab File: VN051833.D

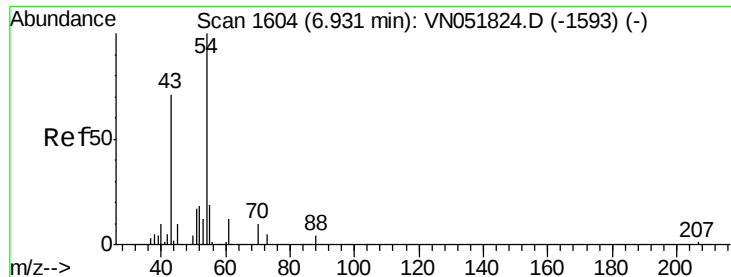
Acq: 12 Oct 2018 15:26

Tgt Ion:	43	Resp:	133806
Ion	Ratio	Lower	Upper
43	100		
86	11.0	6.5	9.7#



Abundance Ion 43.00 (42.70 to 43.70): VN051833.D (-1128) (-)





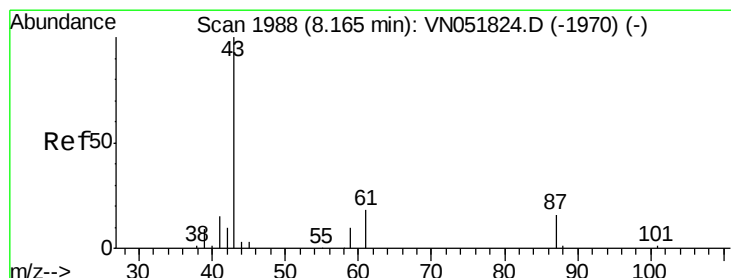
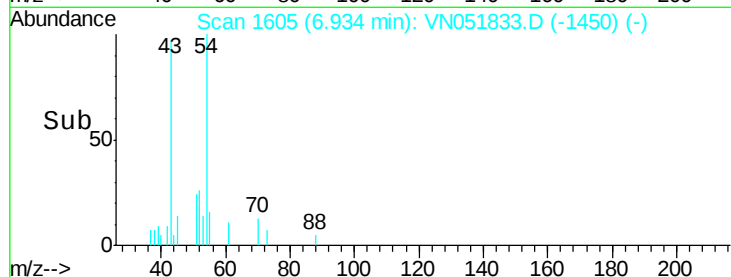
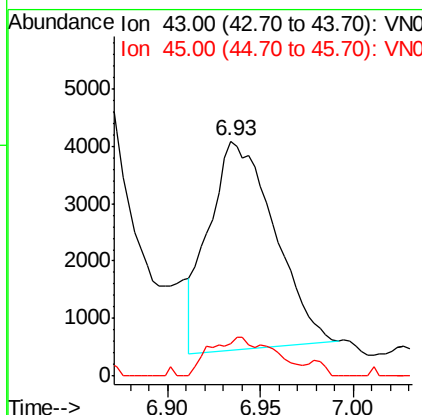
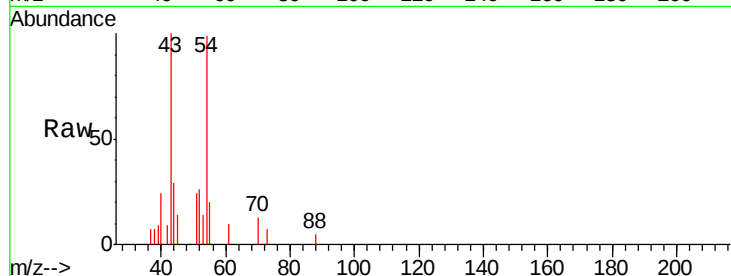
#43
Ethyl Acetate
Concen: 2.19 ug/l
RT: 6.93 min Scan# 1605
Delta R.T. -0.00 min
Lab File: VN051833.D
Acq: 12 Oct 2018 15:26

Instrument :
MSVOA_N
ClientSampleId :
MDL-WATER-03-QT4-2018

Tgt Ion: 43 Resp: 8891
Ion Ratio Lower Upper
43 100
45 2.1 11.0 16.6#

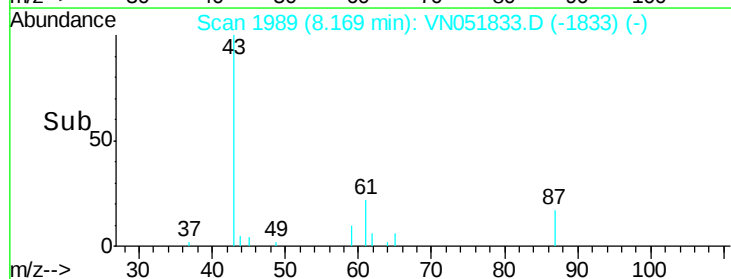
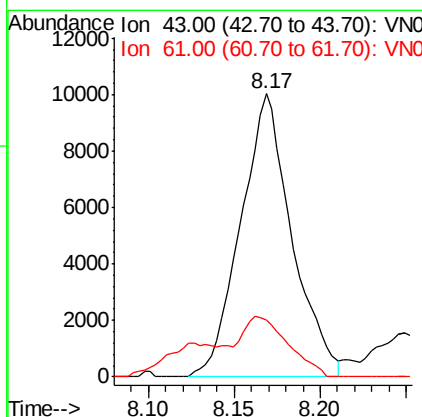
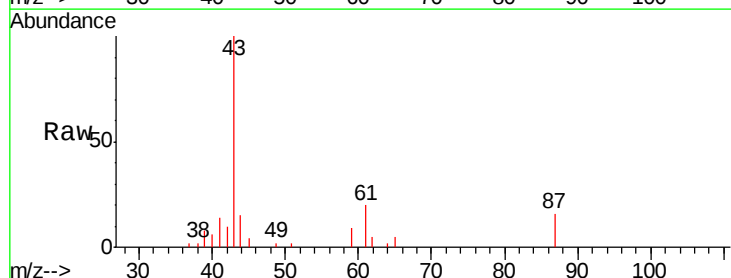
Manual Integrations
APPROVED

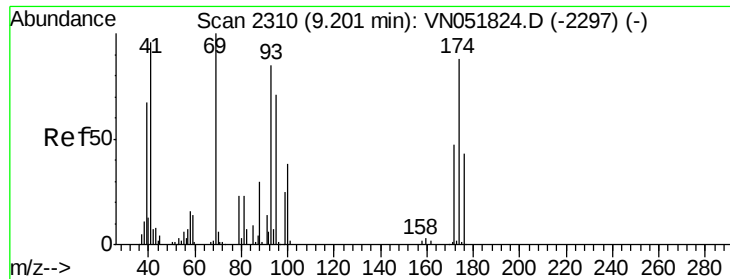
MMDadoda
10/15/2018 11:27:58 AM



#44
Isopropyl Acetate
Concen: 2.55 ug/l
RT: 8.17 min Scan# 1989
Delta R.T. 0.00 min
Lab File: VN051833.D
Acq: 12 Oct 2018 15:26

Tgt Ion: 43 Resp: 20733
Ion Ratio Lower Upper
43 100
61 19.1 15.9 23.9





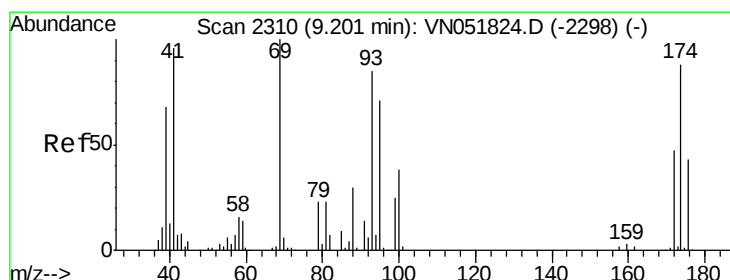
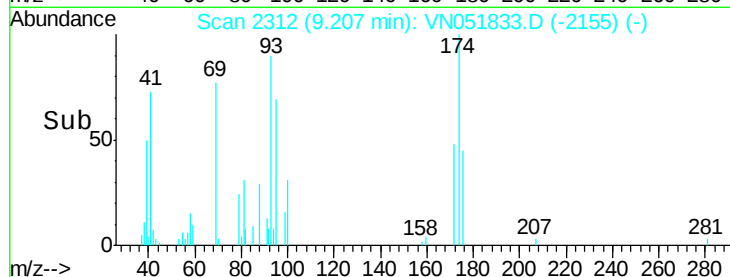
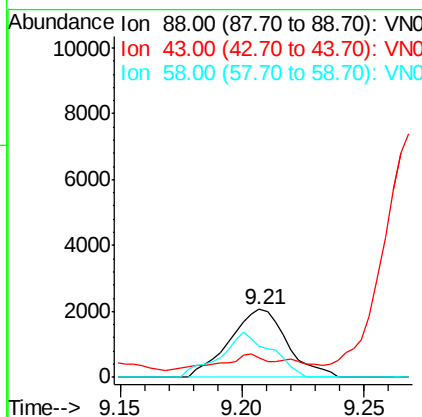
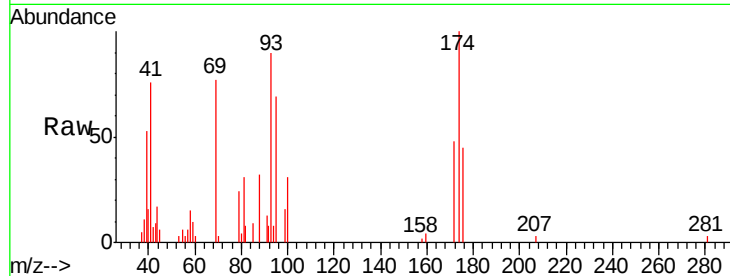
#45
1,4-Dioxane
Concen: 51.65 ug/l
RT: 9.21 min Scan# 2312
Delta R.T. 0.01 min
Lab File: VN051833.D
Acq: 12 Oct 2018 15:26

Instrument :
MSVOA_N
ClientSampleId :
MDL-WATER-03-QT4-2018

Tgt Ion	Ratio	Lower	Upper
88	100		
43	19.4	26.2	39.2#
58	59.3	65.6	98.4#

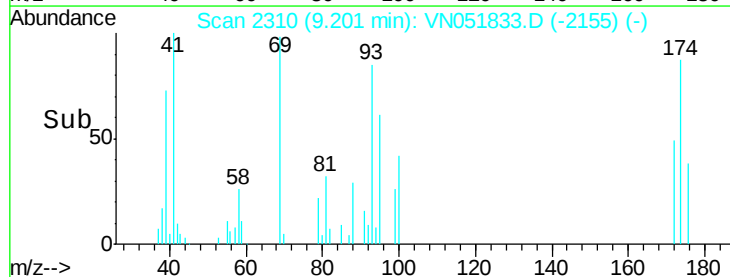
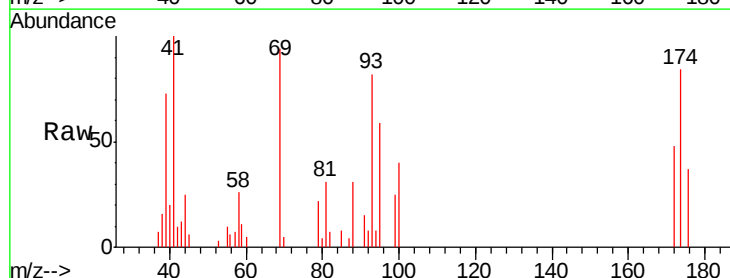
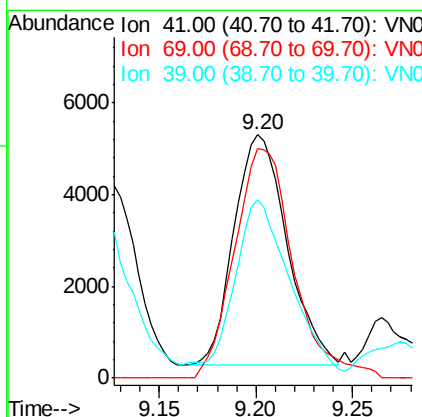
Manual Integrations
APPROVED

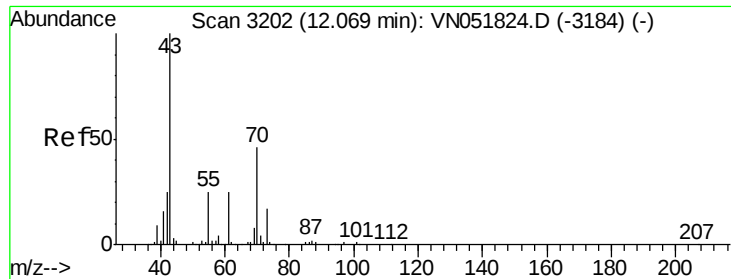
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#46
Methyl methacrylate
Concen: 2.55 ug/l
RT: 9.20 min Scan# 2310
Delta R.T. -0.00 min
Lab File: VN051833.D
Acq: 12 Oct 2018 15:26

Tgt Ion	Ratio	Lower	Upper
41	100		
69	99.9	40.7	122.1
39	73.3	27.3	81.9





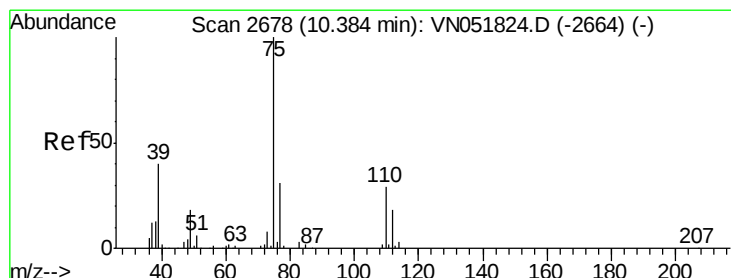
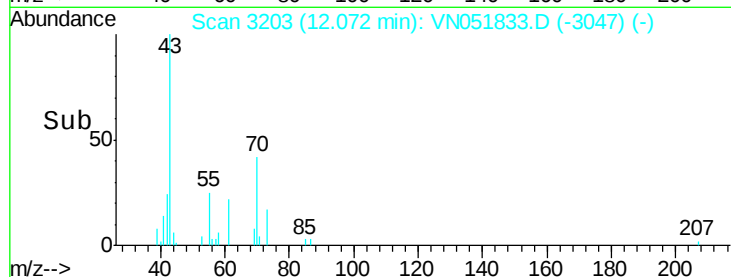
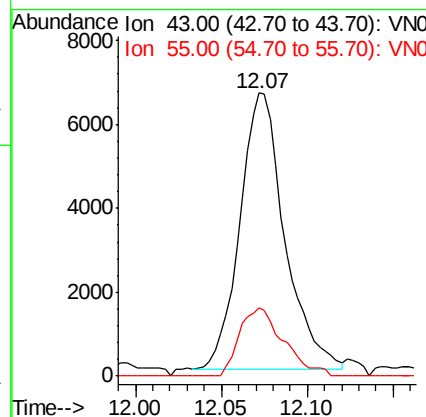
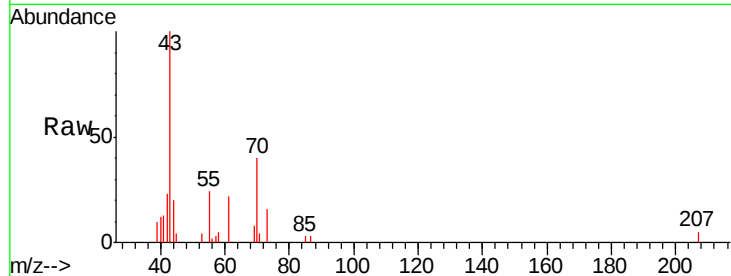
#47
n-amy1 Acetate
Concen: 1.74 ug/l
RT: 12.07 min Scan# 3203
Delta R.T. 0.00 min
Lab File: VN051833.D
Acq: 12 Oct 2018 15:26

Instrument :
MSVOA_N
ClientSampleId :
MDL-WATER-03-QT4-2018

Tgt Ion: 43 Resp: 11867
Ion Ratio Lower Upper
43 100
55 23.8 12.2 18.4#

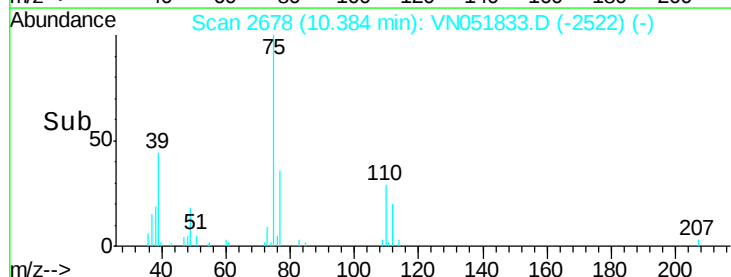
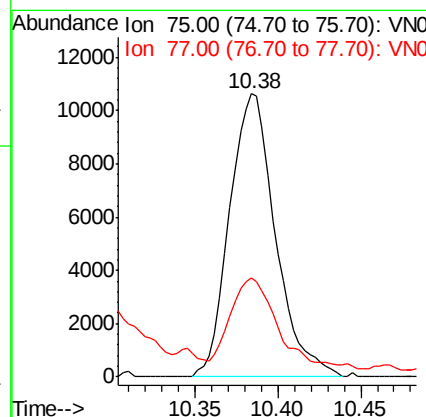
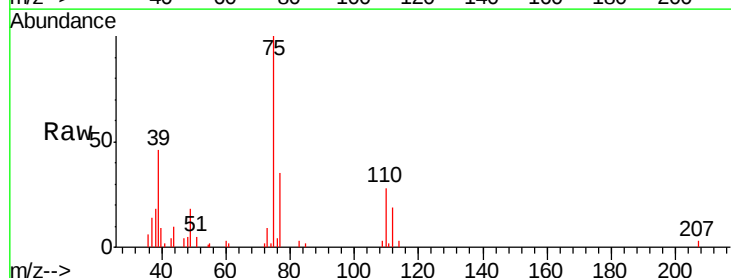
Manual Integrations
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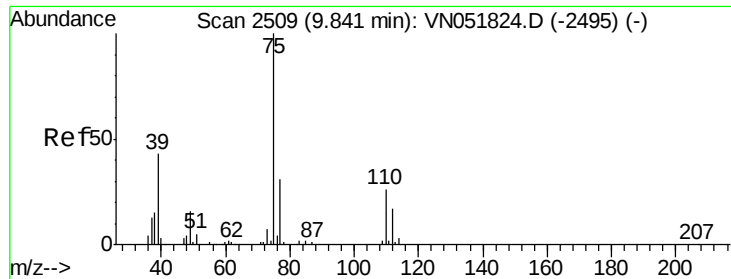
MMDadoda
10/15/2018 11:27:58 AM



#48
t-1,3-Dichloropropene
Concen: 2.19 ug/l
RT: 10.38 min Scan# 2678
Delta R.T. 0.00 min
Lab File: VN051833.D
Acq: 12 Oct 2018 15:26

Tgt Ion: 75 Resp: 20459
Ion Ratio Lower Upper
75 100
77 30.5 24.6 37.0





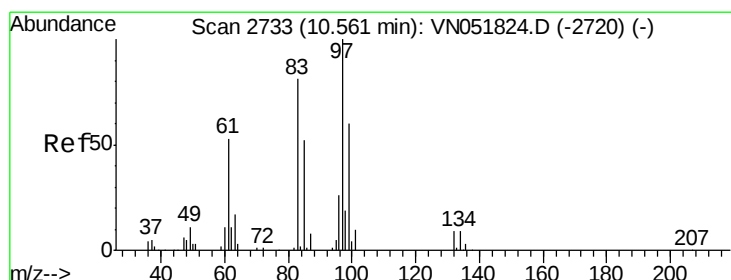
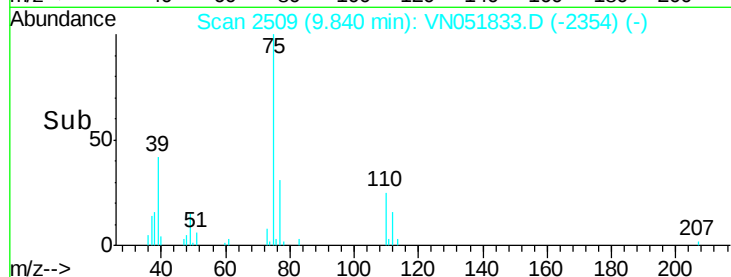
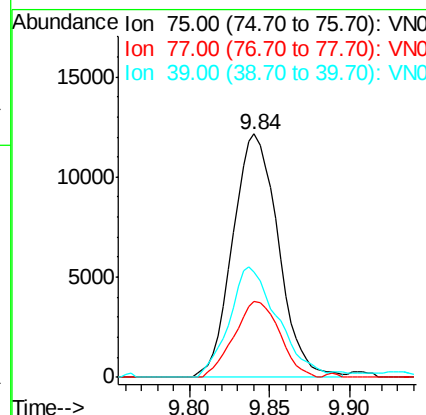
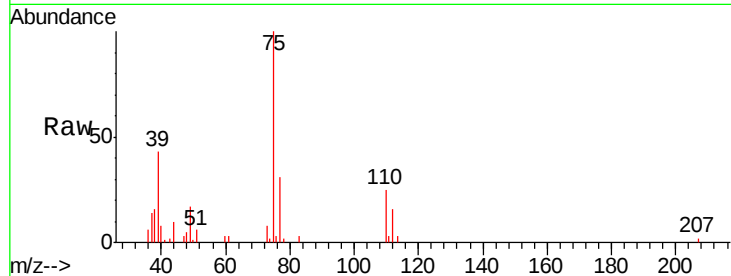
#49
 cis-1,3-Dichloropropene
 Concen: 2.30 ug/l
 RT: 9.84 min Scan# 2509
 Delta R.T. -0.00 min
 Lab File: VN051833.D
 Acq: 12 Oct 2018 15:26

Instrument :
 MSVOA_N
 ClientSampleId :
 MDL-WATER-03-QT4-2018

Tgt Ion	Ratio	Lower	Upper
75	100		
77	31.4	23.2	34.8
39	43.5	34.6	52.0

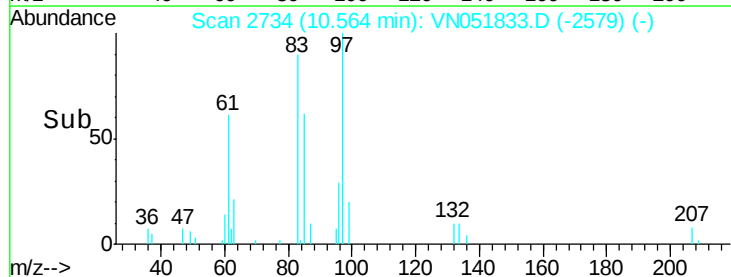
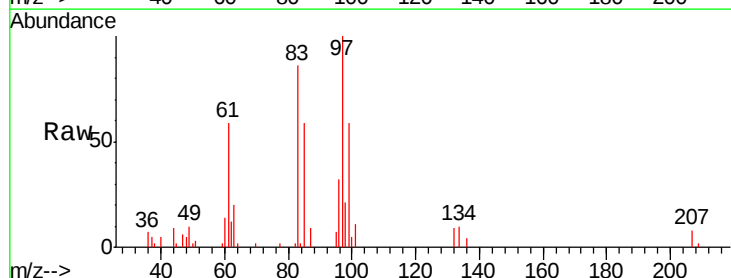
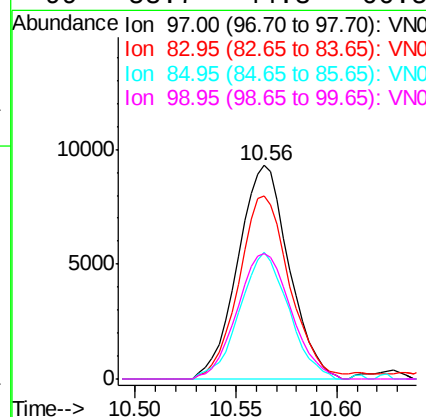
Manual Integrations
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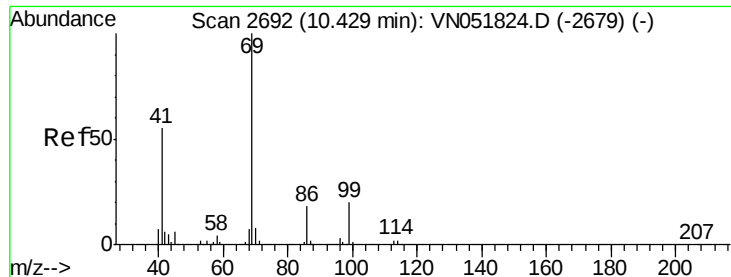
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 10/15/2018 11:27:58 AM



#50
 1,1,2-Trichloroethane
 Concen: 2.58 ug/l
 RT: 10.56 min Scan# 2734
 Delta R.T. -0.00 min
 Lab File: VN051833.D
 Acq: 12 Oct 2018 15:26

Tgt Ion	Ratio	Lower	Upper
97	100		
83	85.8	68.2	102.4
85	59.3	42.5	63.7
99	58.7	44.3	66.5





#51

Ethyl methacrylate

Concen: 2.29 ug/l

RT: 10.43 min Scan# 2693

Delta R.T. 0.00 min

Lab File: VN051833.D

Acq: 12 Oct 2018 15:26

Instrument :

MSVOA_N

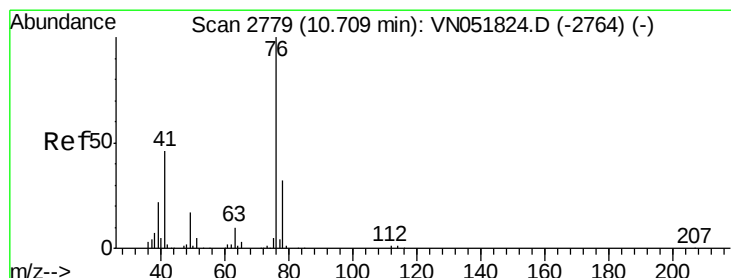
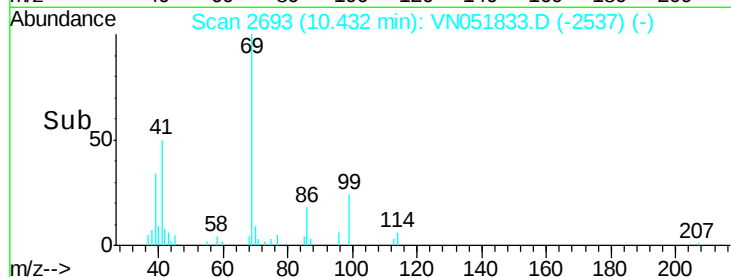
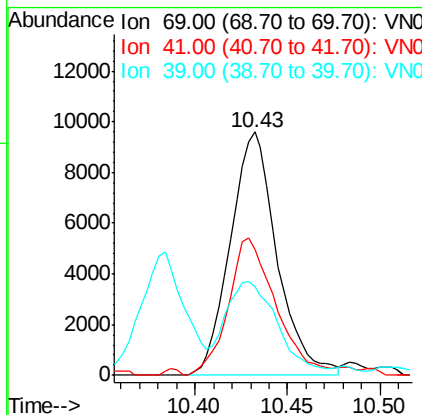
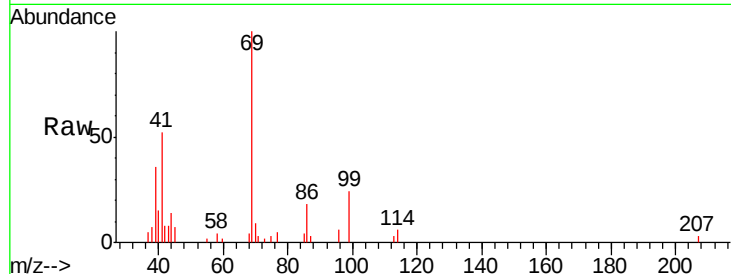
ClientSampleId :

MDL-WATER-03-QT4-2018

Tgt Ion:	69	Resp:	16804
Ion	Ratio	Lower	Upper
69	100		
41	51.9	34.4	103.1
39	32.6	16.3	48.8

Manual Integrations
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#52

1,3-Dichloropropane

Concen: 2.56 ug/l

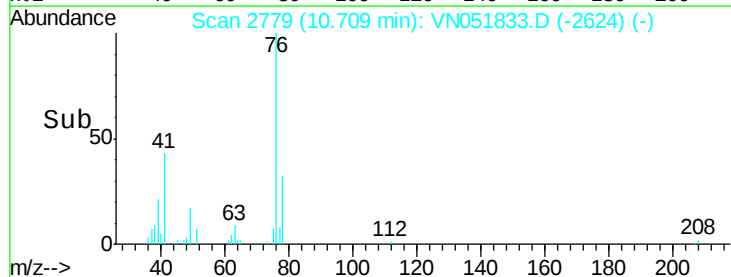
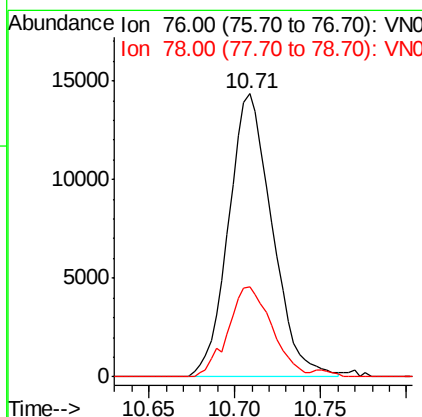
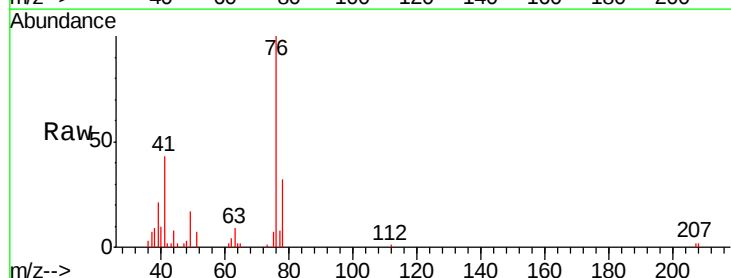
RT: 10.71 min Scan# 2779

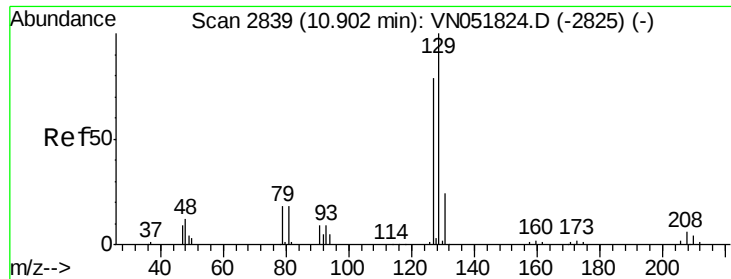
Delta R.T. -0.00 min

Lab File: VN051833.D

Acq: 12 Oct 2018 15:26

Tgt Ion:	76	Resp:	25343
Ion	Ratio	Lower	Upper
76	100		
78	31.8	0.0	67.6





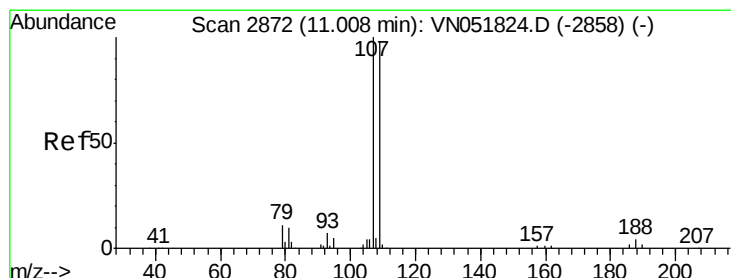
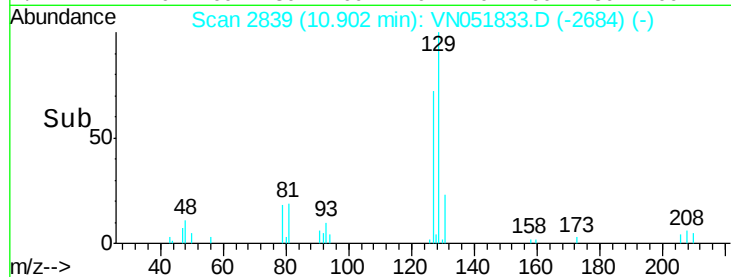
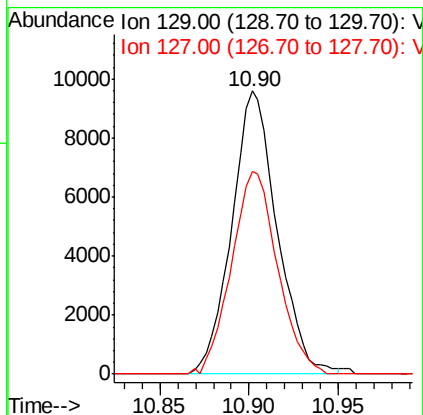
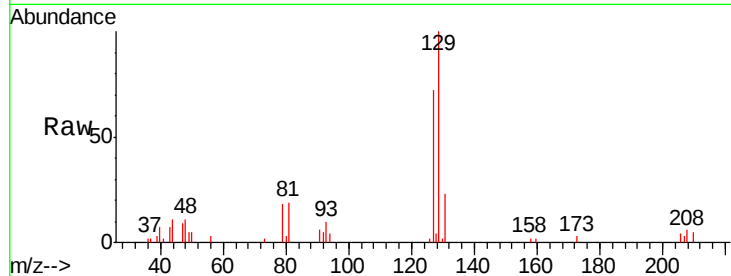
#53
 Dibromochloromethane
 Concen: 2.15 ug/l
 RT: 10.90 min Scan# 2839
 Delta R.T. -0.00 min
 Lab File: VN051833.D
 Acq: 12 Oct 2018 15:26

Instrument :
 MSVOA_N
 ClientSampleId :
 MDL-WATER-03-QT4-2018

Tgt Ion	Ratio	Lower	Upper
129	100		
127	72.6	40.2	120.5

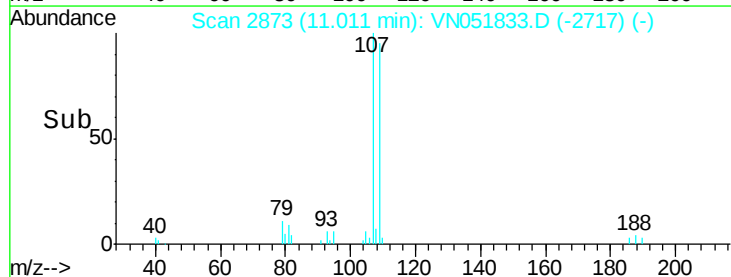
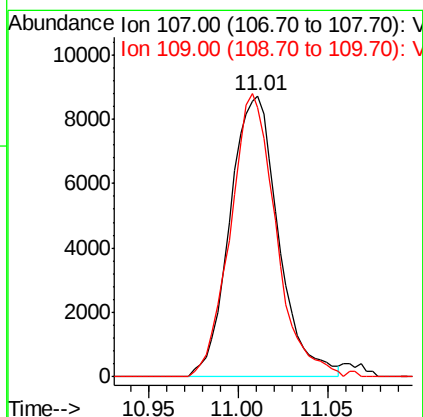
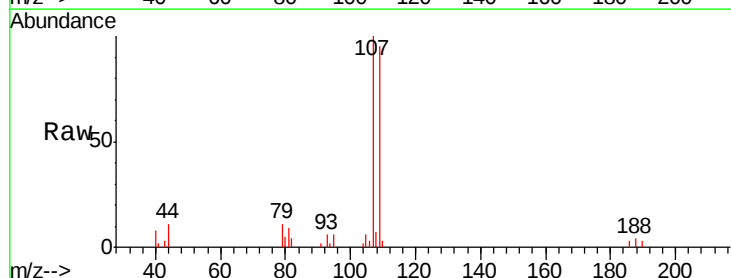
Manual Integrations
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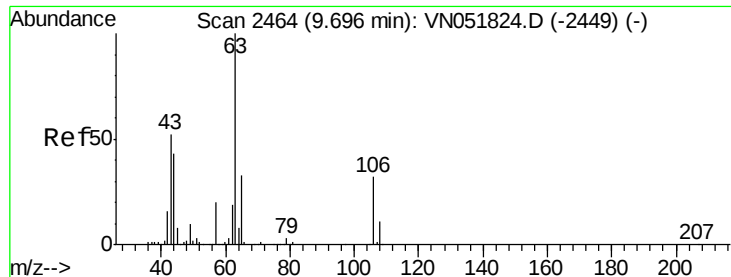
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#54
 1,2-Dibromoethane
 Concen: 2.46 ug/l
 RT: 11.01 min Scan# 2873
 Delta R.T. 0.00 min
 Lab File: VN051833.D
 Acq: 12 Oct 2018 15:26

Tgt Ion	Ratio	Lower	Upper
107	100		
109	94.6	77.4	116.0





#55

2-Chloroethyl vinyl ether

Concen: 11.49 ug/l

RT: 9.70 min Scan# 2465

Delta R.T. 0.00 min

Lab File: VN051833.D

Acq: 12 Oct 2018 15:26

Instrument :

MSVOA_N

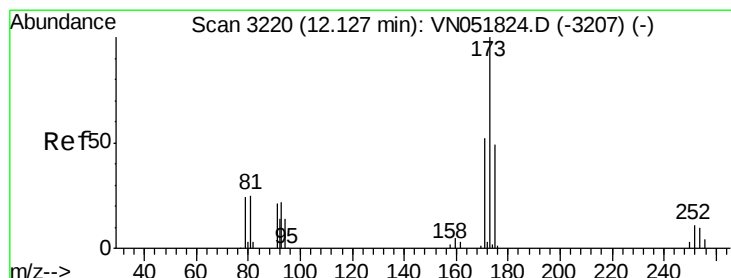
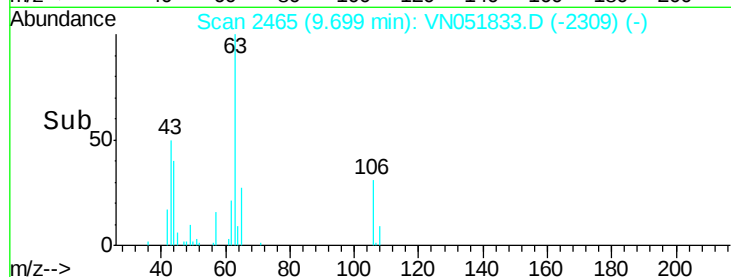
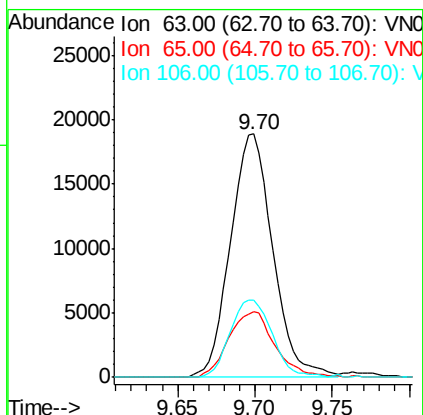
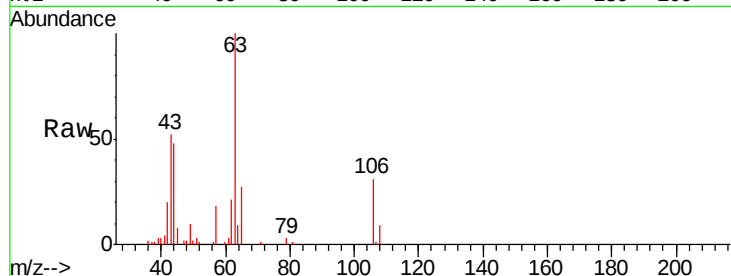
ClientSampleId :

MDL-WATER-03-QT4-2018

Tgt Ion:	63	Resp:	36007
Ion Ratio	Lower	Upper	
63	100		
65	28.7	25.4	38.0
106	31.6	21.2	31.8

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#56

Bromoform

Concen: 1.74 ug/l

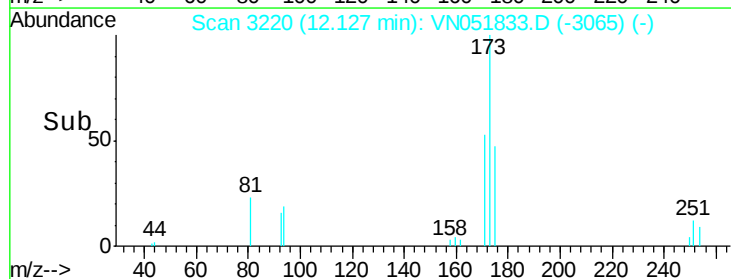
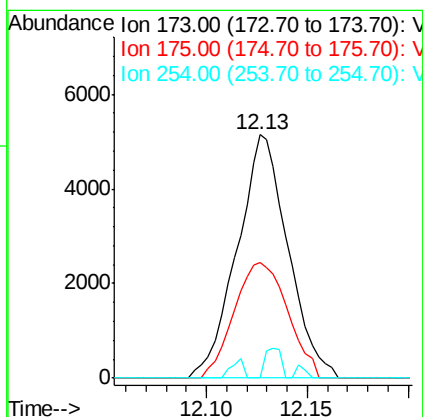
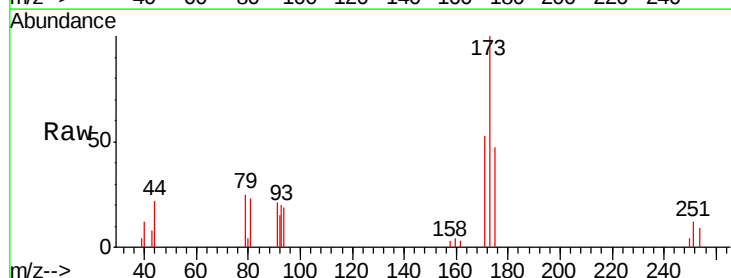
RT: 12.13 min Scan# 3220

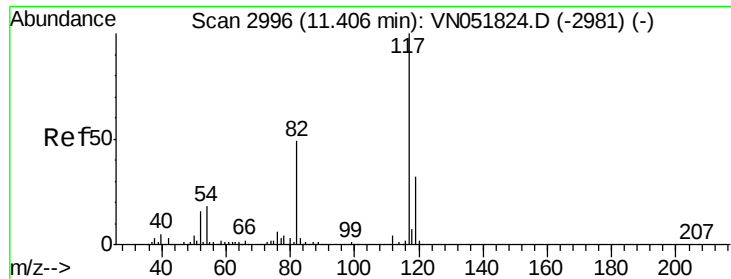
Delta R.T. -0.00 min

Lab File: VN051833.D

Acq: 12 Oct 2018 15:26

Tgt Ion:	173	Resp:	9066
Ion Ratio	Lower	Upper	
173	100		
175	49.9	35.8	53.8
254	3.9	8.6	13.0#





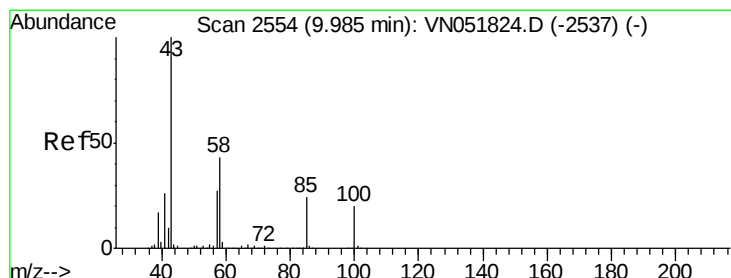
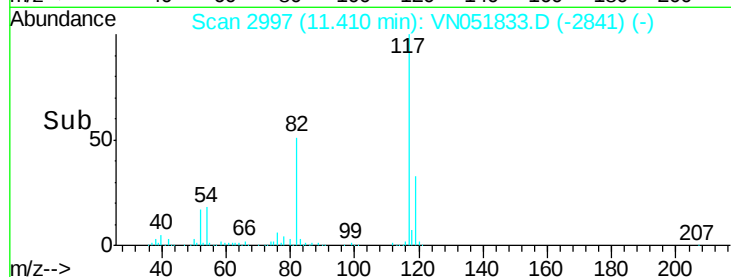
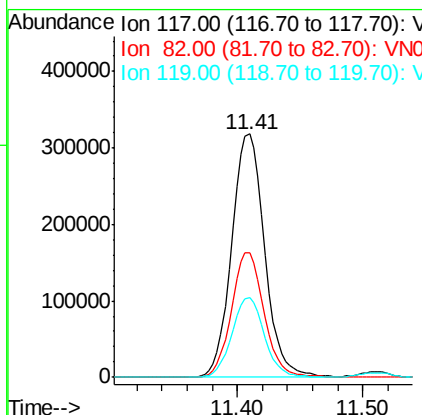
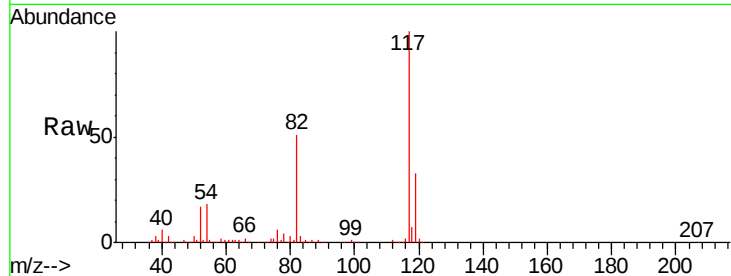
#57
Chlorobenzene-d5
Concen: 30.00 ug/l
RT: 11.41 min Scan# 2997
Delta R.T. 0.00 min
Lab File: VN051833.D
Acq: 12 Oct 2018 15:26

Instrument :
MSVOA_N
ClientSampleId :
MDL-WATER-03-QT4-2018

Tgt Ion	Ratio	Resp Lower	Resp Upper
117	100		
82	50.8	44.1	66.1
119	32.3	25.8	38.8

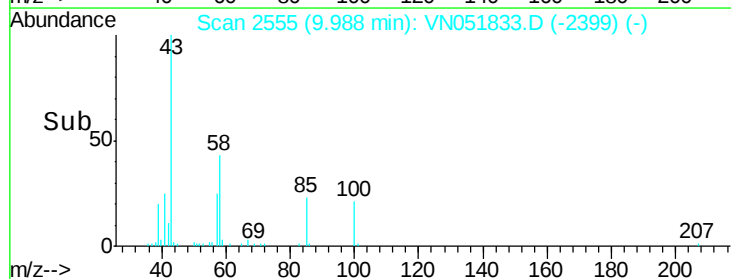
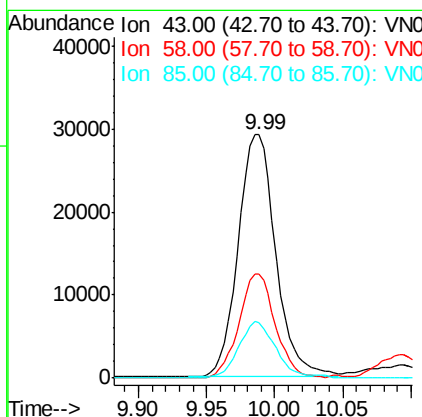
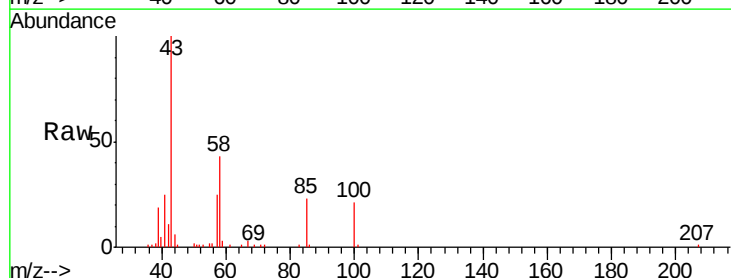
Manual Integrations
APPROVED

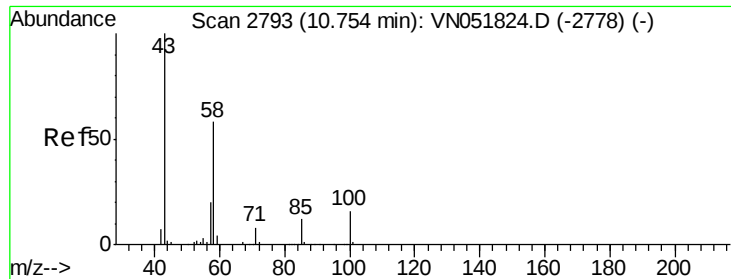
MMDadoda
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#58
4-Methyl-2-Pentanone
Concen: 14.32 ug/l
RT: 9.99 min Scan# 2555
Delta R.T. 0.00 min
Lab File: VN051833.D
Acq: 12 Oct 2018 15:26

Tgt Ion	Ratio	Resp Lower	Resp Upper
43	100		
58	41.6	29.3	43.9
85	22.7	12.6	18.8





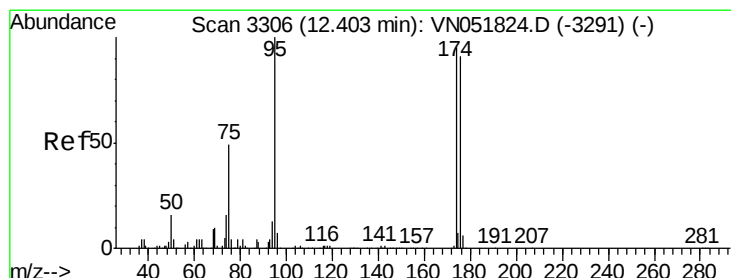
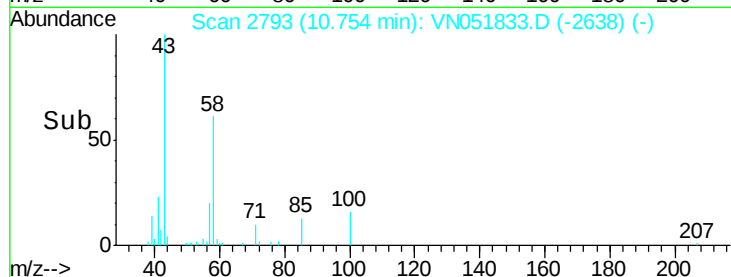
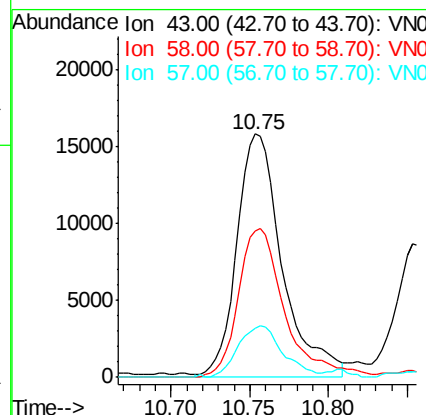
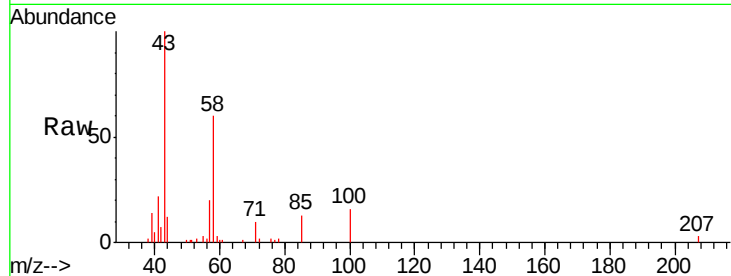
#59
2-Hexanone
Concen: 12.09 ug/l m
RT: 10.75 min Scan# 2793
Delta R.T. -0.00 min
Lab File: VN051833.D
Acq: 12 Oct 2018 15:26

Instrument :
MSVOA_N
ClientSampleId :
MDL-WATER-03-QT4-2018

Tgt Ion	Ratio	Lower	Upper
43	100		
58	1.0	41.3	61.9#
57	0.3	13.4	20.0#

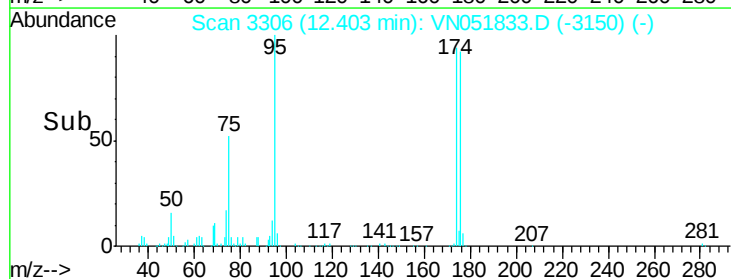
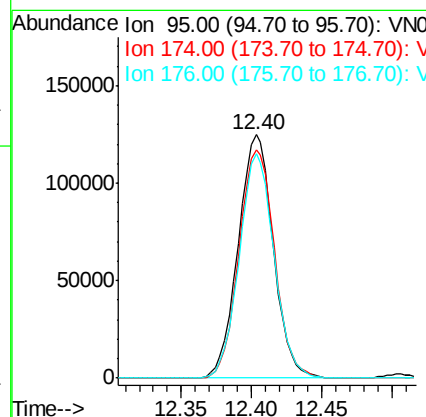
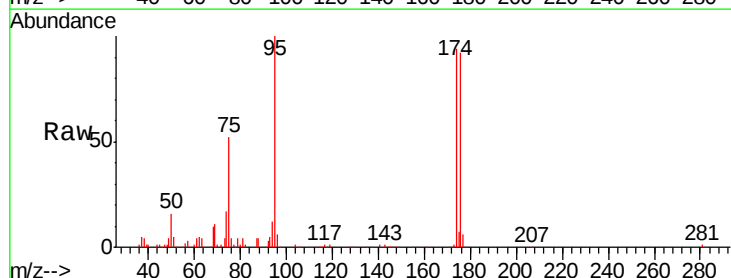
Manual Integrations
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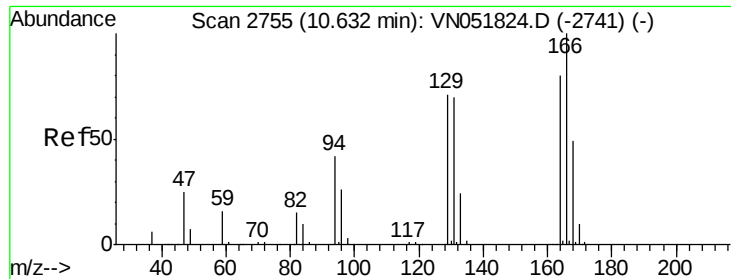
MMDadoda
10/15/2018 11:27:58 AM



#60
4-Bromofluorobenzene
Concen: 12.09 ug/l
RT: 12.40 min Scan# 3306
Delta R.T. 0.00 min
Lab File: VN051833.D
Acq: 12 Oct 2018 15:26

Tgt Ion	Ratio	Lower	Upper
95	100		
174	95.0	73.5	110.3
176	91.6	70.2	105.2





#61

Tetrachloroethene

Concen: 2.83 ug/l

RT: 10.63 min Scan# 2756

Delta R.T. 0.00 min

Lab File: VN051833.D

Acq: 12 Oct 2018 15:26

Instrument :

MSVOA_N

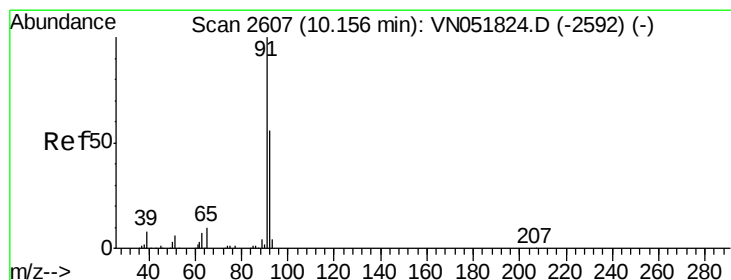
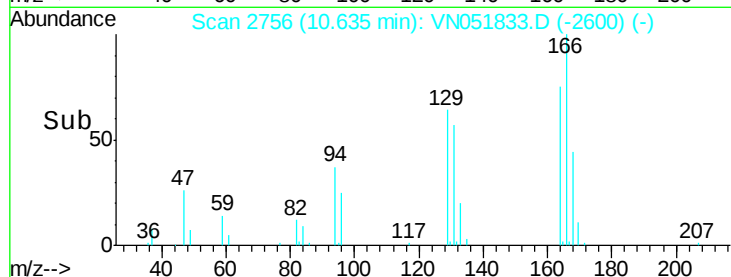
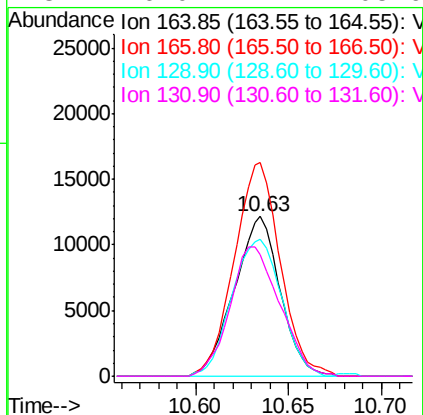
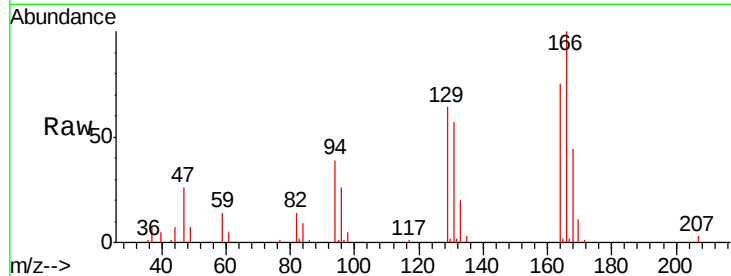
ClientSampleId :

MDL-WATER-03-QT4-2018

Tgt Ion:	164	Resp:	21010
Ion	Ratio	Lower	Upper
164	100		
166	133.6	98.7	148.1
129	85.5	69.6	104.4
131	76.0	72.4	108.6

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#62

Toluene

Concen: 2.83 ug/l

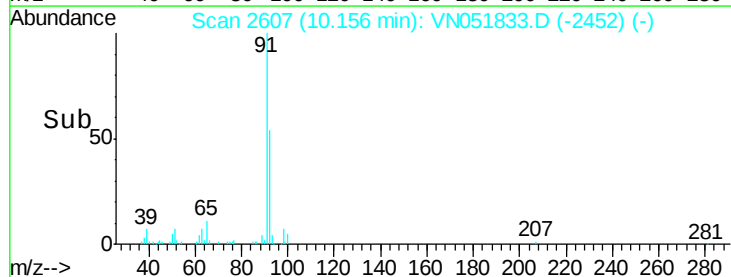
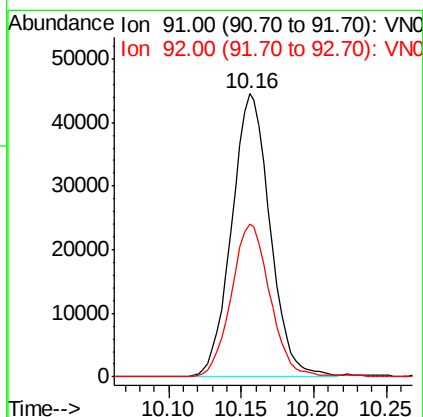
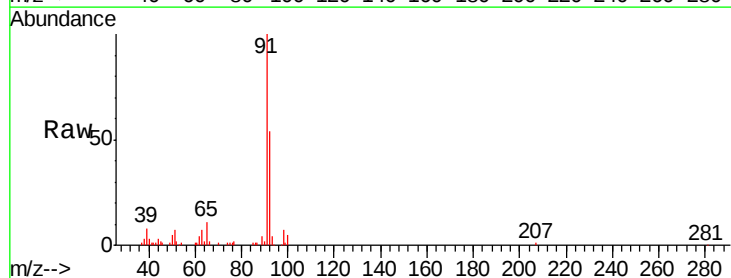
RT: 10.16 min Scan# 2607

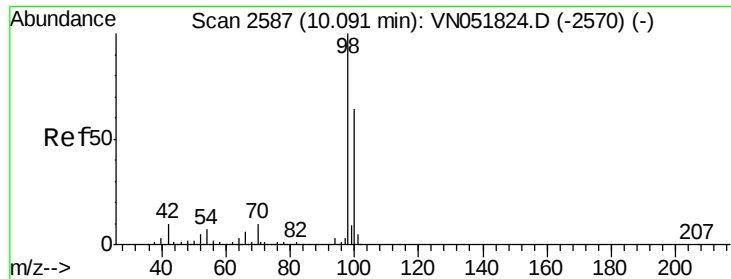
Delta R.T. -0.00 min

Lab File: VN051833.D

Acq: 12 Oct 2018 15:26

Tgt Ion:	91	Resp:	81697
Ion	Ratio	Lower	Upper
91	100		
92	54.5	44.6	66.8





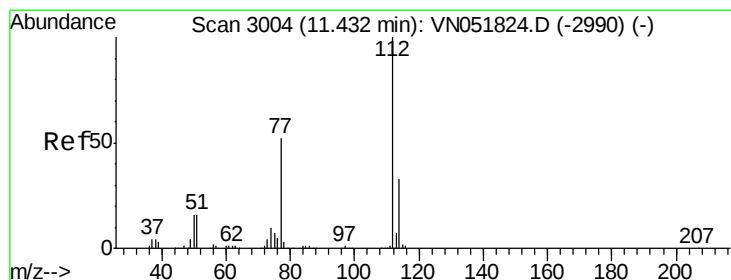
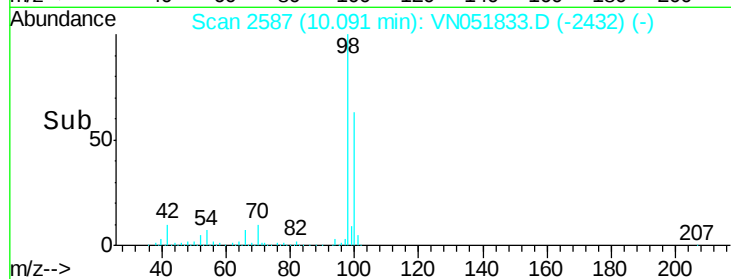
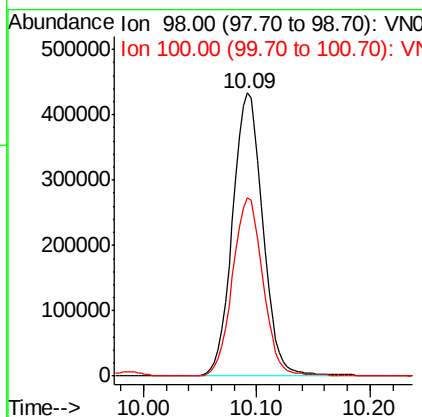
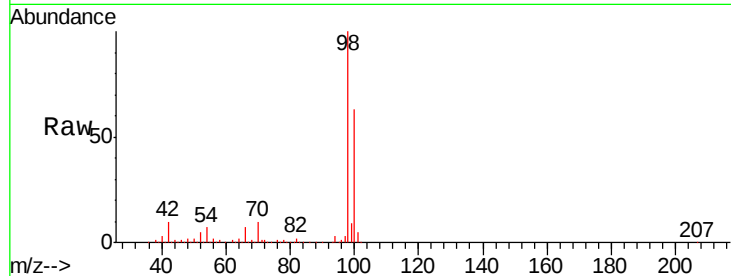
#63
Toluene-d8
Concen: 2.83 ug/l
RT: 10.09 min Scan# 2587
Delta R.T. -0.00 min
Lab File: VN051833.D
Acq: 12 Oct 2018 15:26

Instrument :
MSVOA_N
ClientSampleId :
MDL-WATER-03-QT4-2018

Tgt Ion: 98 Resp: 809645
Ion Ratio Lower Upper
98 100
100 63.5 50.8 76.2

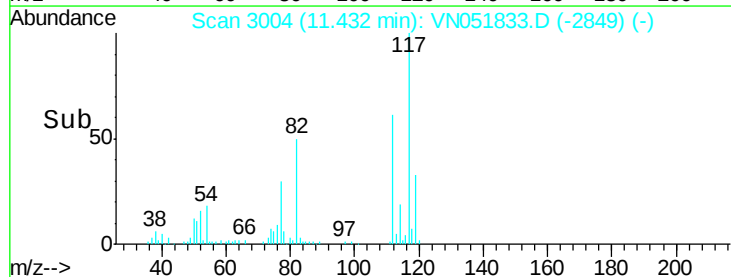
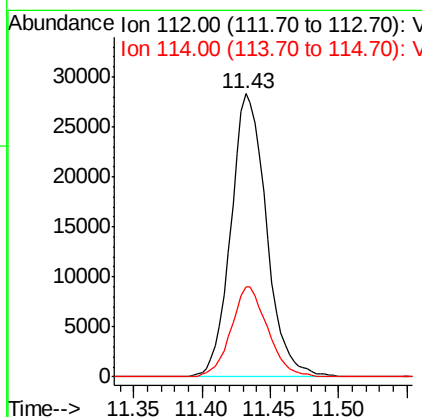
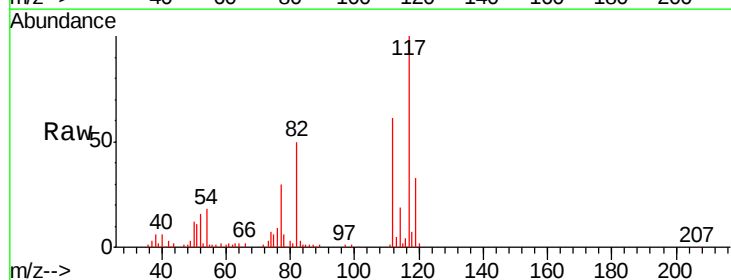
Manual Integrations
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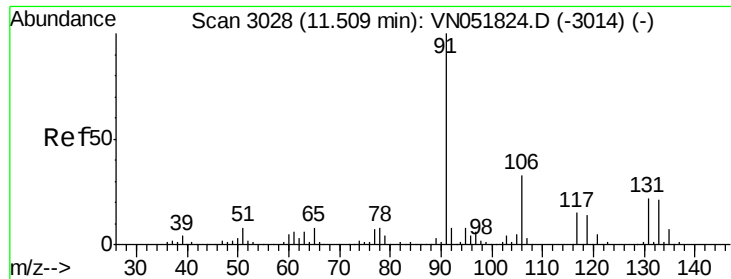
MMDadoda
10/15/2018 11:27:58 AM



#64
Chlorobenzene
Concen: 2.71 ug/l
RT: 11.43 min Scan# 3004
Delta R.T. -0.00 min
Lab File: VN051833.D
Acq: 12 Oct 2018 15:26

Tgt Ion: 112 Resp: 51274
Ion Ratio Lower Upper
112 100
114 31.7 27.5 41.3





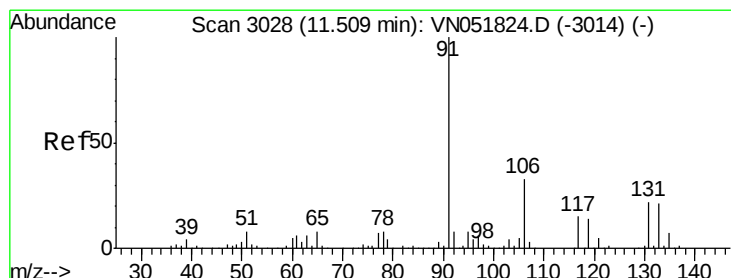
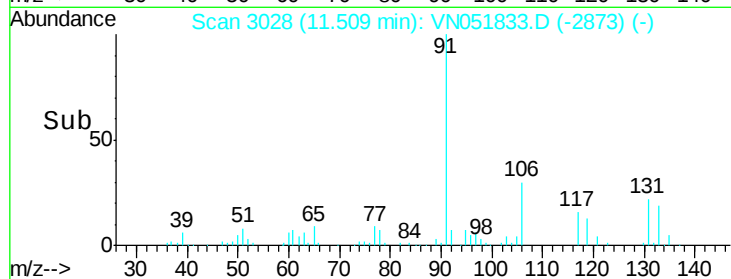
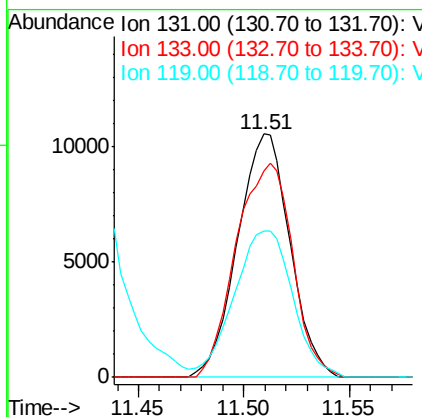
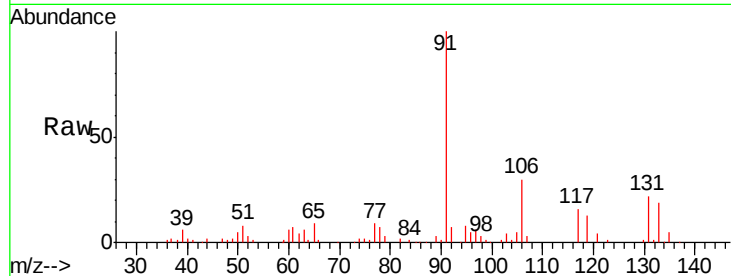
#65
 1,1,1,2-Tetrachloroethane
 Concen: 2.51 ug/l
 RT: 11.51 min Scan# 3028
 Delta R.T. -0.00 min
 Lab File: VN051833.D
 Acq: 12 Oct 2018 15:26

Instrument :
 MSVOA_N
 ClientSampleId :
 MDL-WATER-03-QT4-2018

Tgt Ion: 131 Resp: 18234
 Ion Ratio Lower Upper
 131 100
 133 94.9 0.0 190.4
 119 67.6 0.0 128.0

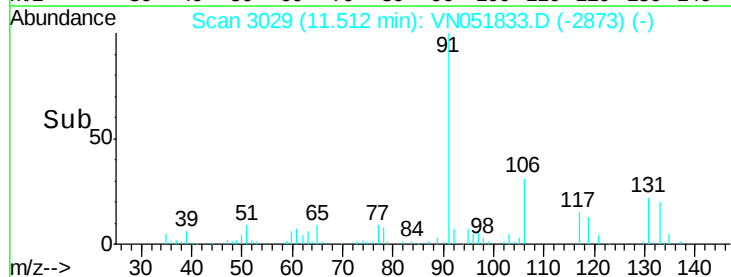
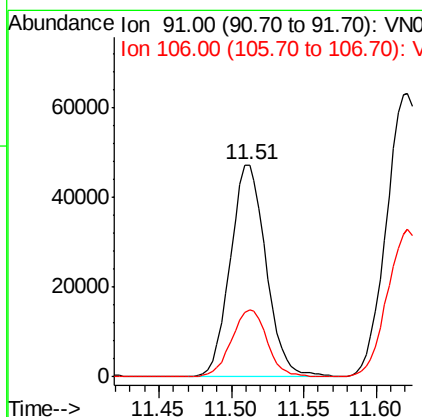
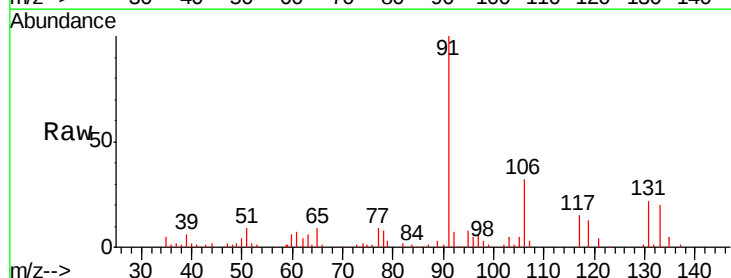
Manual Integrations
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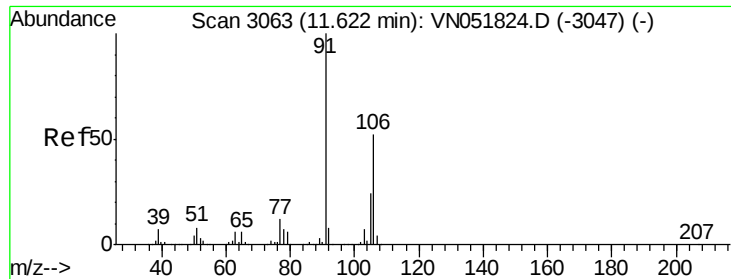
MMDadoda
 10/15/2018 11:27:58 AM



#66
 Ethyl Benzene
 Concen: 2.54 ug/l
 RT: 11.51 min Scan# 3029
 Delta R.T. 0.00 min
 Lab File: VN051833.D
 Acq: 12 Oct 2018 15:26

Tgt Ion: 91 Resp: 81130
 Ion Ratio Lower Upper
 91 100
 106 31.8 25.9 38.9





#67

m/p-Xylenes

Concen: 4.95 ug/l

RT: 11.62 min Scan# 3063

Delta R.T. -0.00 min

Lab File: VN051833.D

Acq: 12 Oct 2018 15:26

Instrument :

MSVOA_N

ClientSampleId :

MDL-WATER-03-QT4-2018

Tgt Ion:106 Resp: 64029

Ion Ratio Lower Upper

106 100

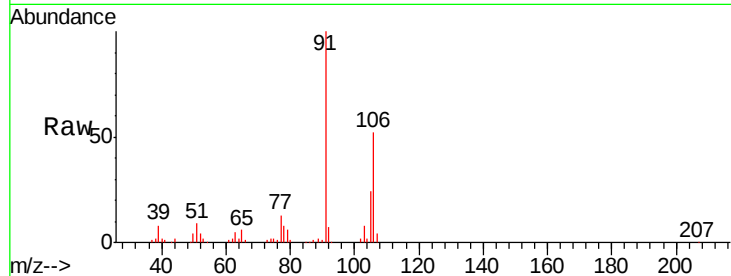
91 197.0 158.8 238.2

Manual Integrations

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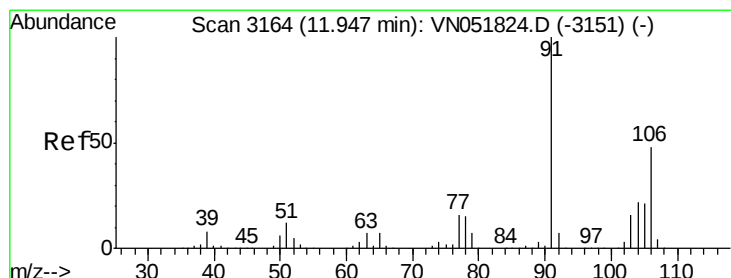
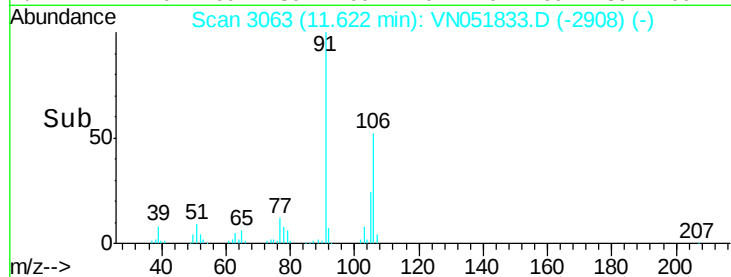
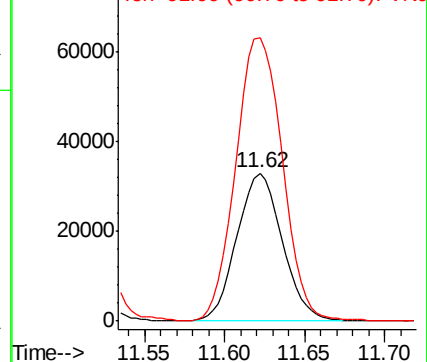
MMDadoda

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Abundance Ion 106.00 (105.70 to 106.70): V

Ion 91.00 (90.70 to 91.70): VN0



#68

o-Xylene

Concen: 2.50 ug/l

RT: 11.95 min Scan# 3165

Delta R.T. 0.00 min

Lab File: VN051833.D

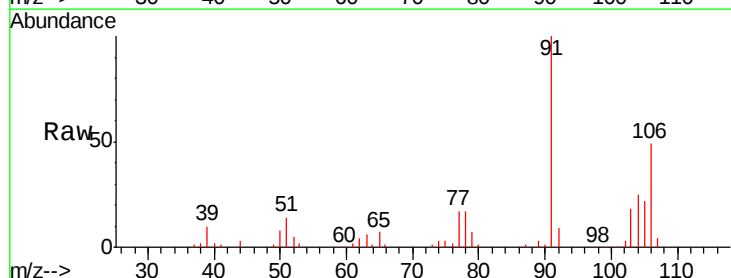
Acq: 12 Oct 2018 15:26

Tgt Ion:106 Resp: 31882

Ion Ratio Lower Upper

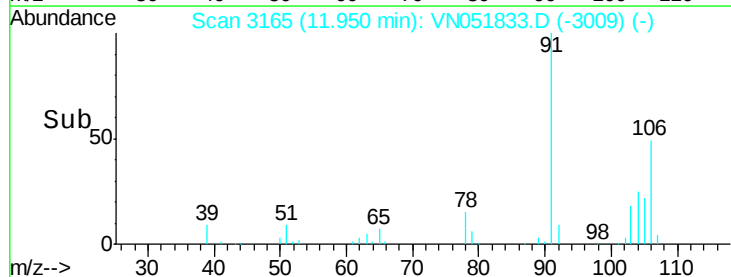
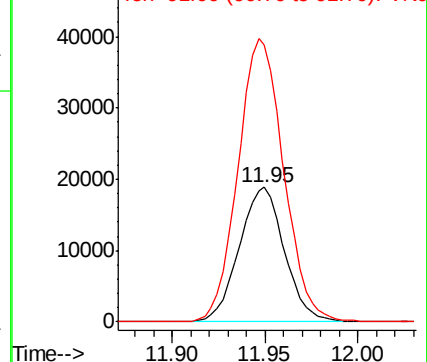
106 100

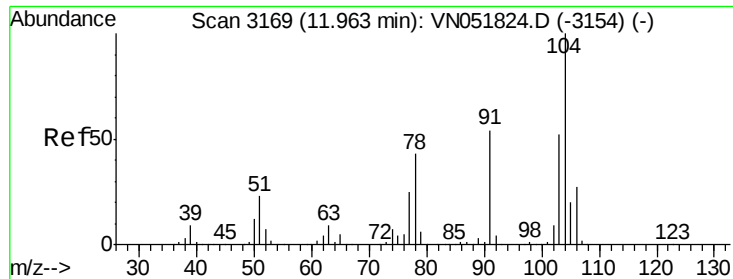
91 212.8 111.1 333.3



Abundance Ion 106.00 (105.70 to 106.70): V

Ion 91.00 (90.70 to 91.70): VN0





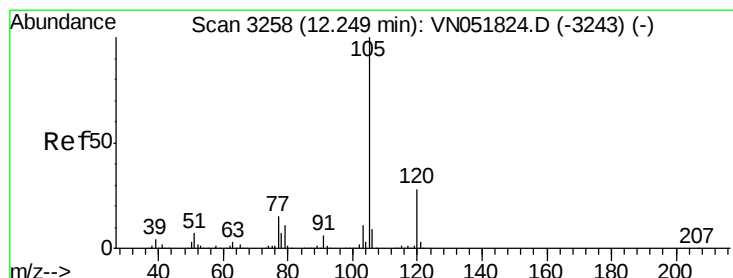
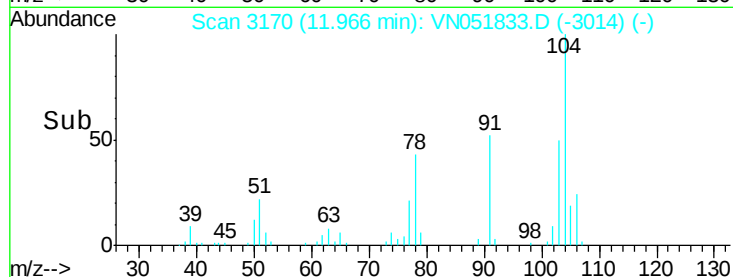
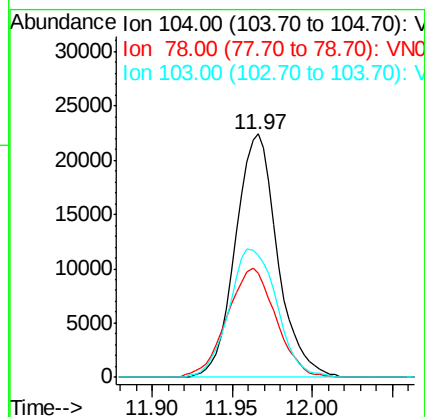
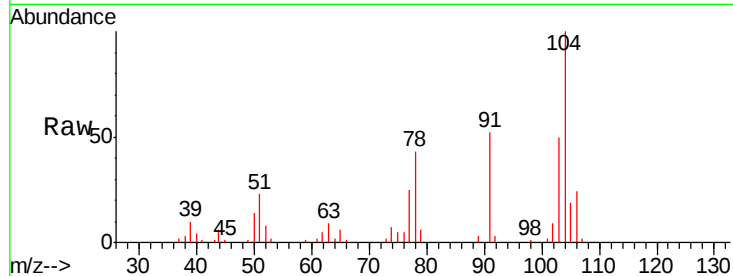
#69
Styrene
Concen: 2.05 ug/l
RT: 11.97 min Scan# 3170
Delta R.T. 0.00 min
Lab File: VN051833.D
Acq: 12 Oct 2018 15:26

Instrument :
MSVOA_N
ClientSampleId :
MDL-WATER-03-QT4-2018

Tgt Ion	Ratio	Lower	Upper
104	100		
78	52.2	40.6	60.8
103	60.0	44.0	66.0

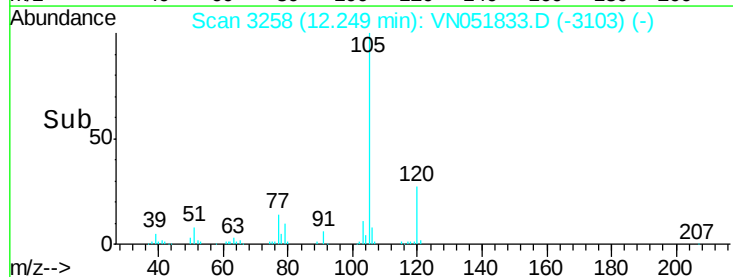
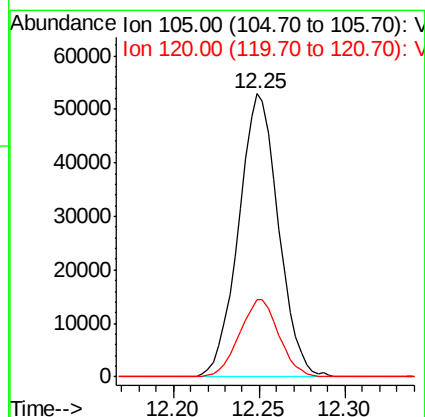
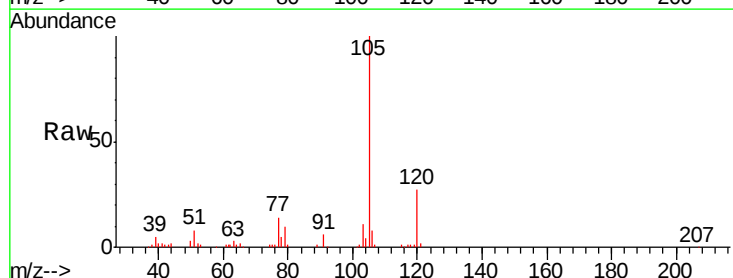
Manual Integrations
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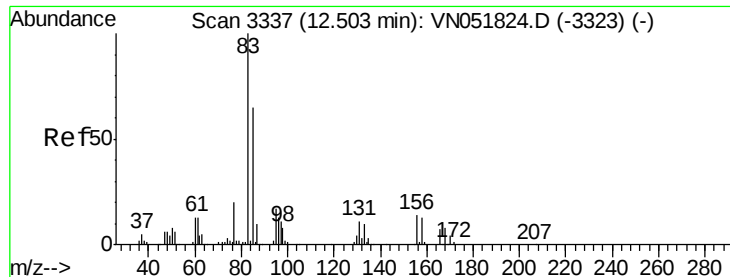
MMDadoda
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#70
Isopropylbenzene
Concen: 2.51 ug/l
RT: 12.25 min Scan# 3258
Delta R.T. -0.00 min
Lab File: VN051833.D
Acq: 12 Oct 2018 15:26

Tgt Ion	Ratio	Lower	Upper
105	100		
120	27.1	19.0	35.4





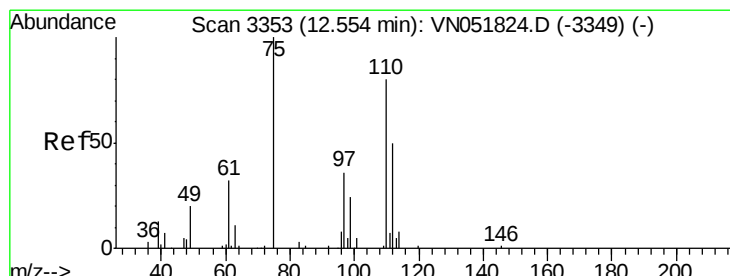
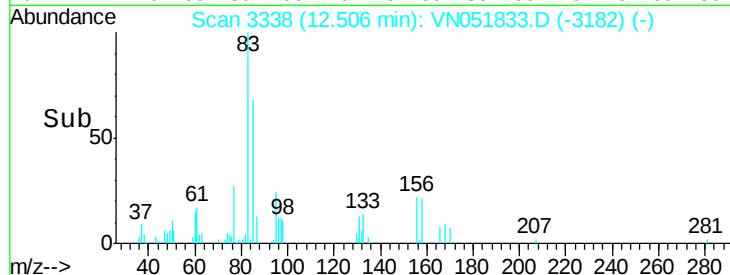
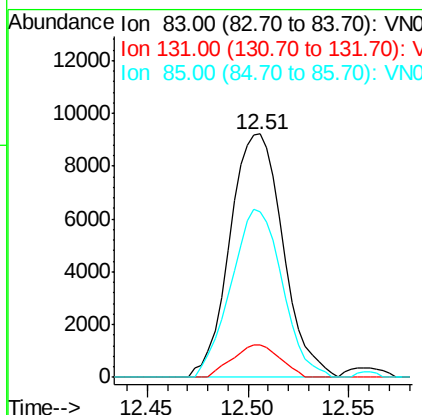
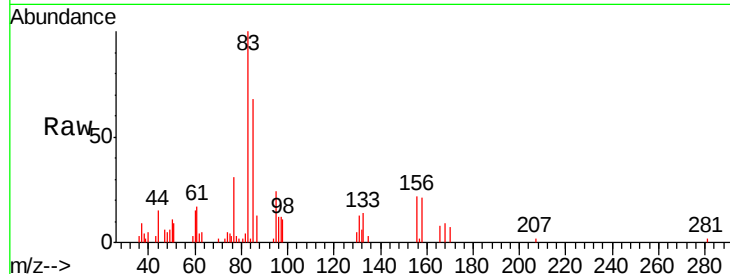
#71
 1,1,2,2-Tetrachloroethane
 Concen: 2.53 ug/l
 RT: 12.51 min Scan# 3338
 Delta R.T. 0.00 min
 Lab File: VN051833.D
 Acq: 12 Oct 2018 15:26

Instrument :
 MSVOA_N
 ClientSampleId :
 MDL-WATER-03-QT4-2018

Tgt Ion	Ratio	Lower	Upper
83	100		
131	12.0	5.5	16.4
85	66.8	30.6	91.8

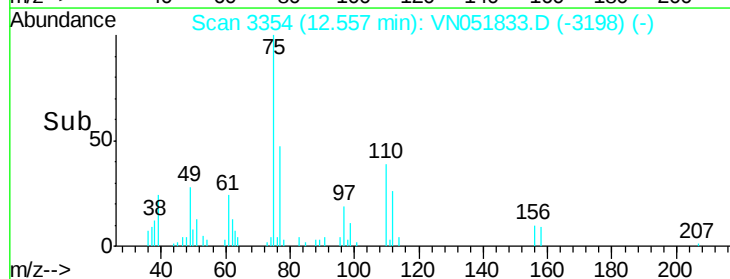
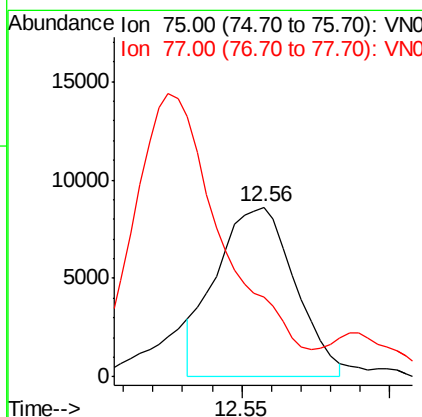
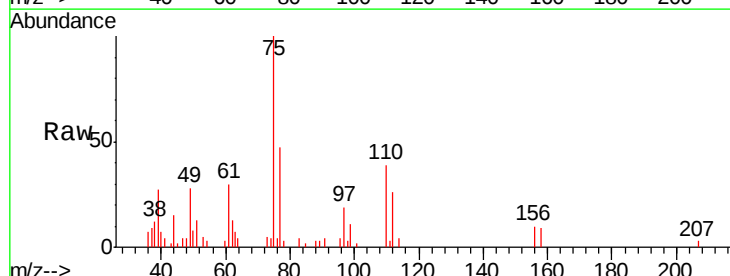
Manual Integrations
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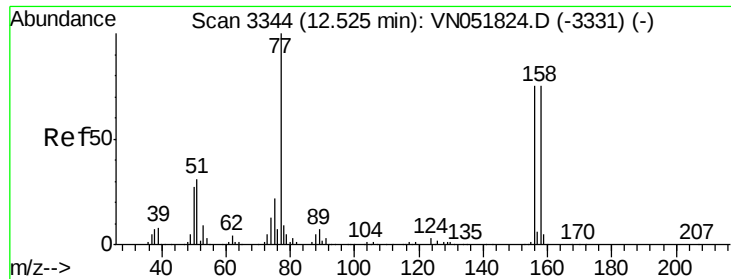
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#72
 1,2,3-Trichloropropane
 Concen: 3.01 ug/l m
 RT: 12.56 min Scan# 3354
 Delta R.T. 0.00 min
 Lab File: VN051833.D
 Acq: 12 Oct 2018 15:26

Tgt Ion	Ratio	Lower	Upper
75	100		
77	193.8	0.0	400.0





#73

Bromobenzene

Concen: 2.30 ug/l

RT: 12.53 min Scan# 3344

Delta R.T. -0.00 min

Lab File: VN051833.D

Acq: 12 Oct 2018 15:26

Instrument :

MSVOA_N

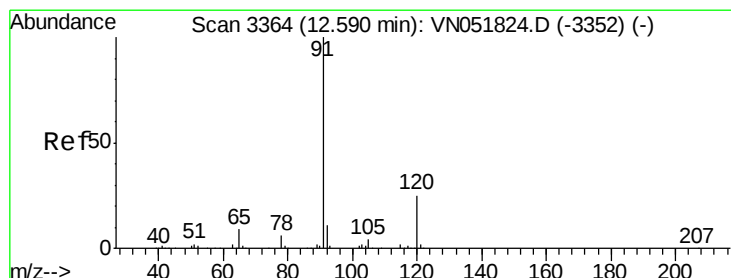
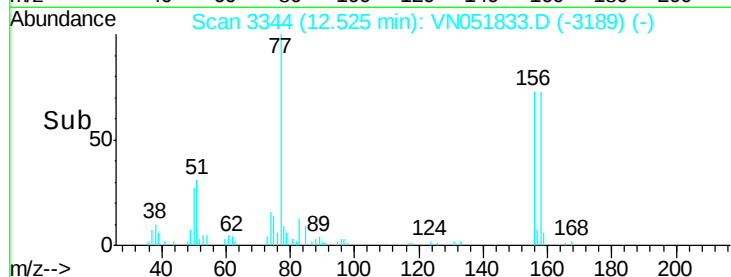
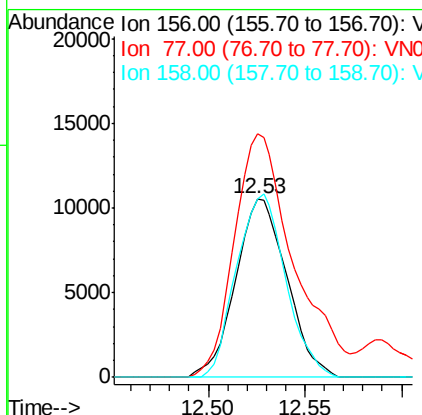
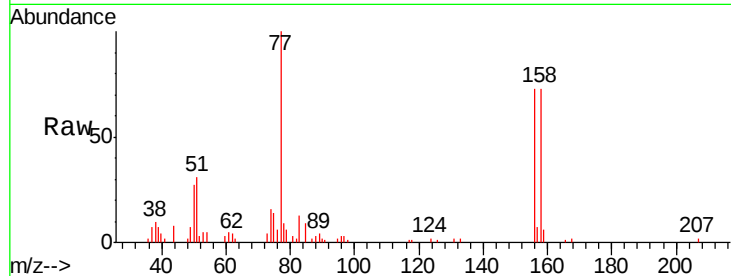
ClientSampleId :

MDL-WATER-03-QT4-2018

Tgt Ion	Ratio	Resp	Lower	Upper
156	100	19407		
77	158.8	0.0	377.4	
158	99.1	0.0	203.0	

Manual Integrations
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#74

n-propylbenzene

Concen: 2.23 ug/l

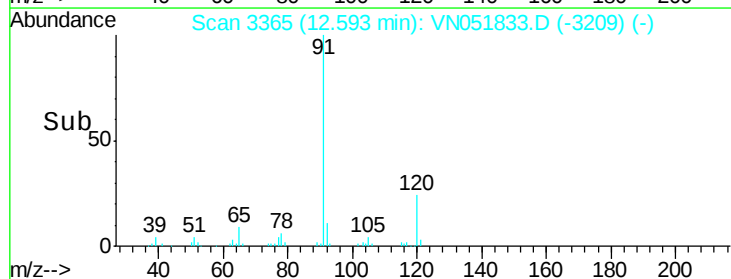
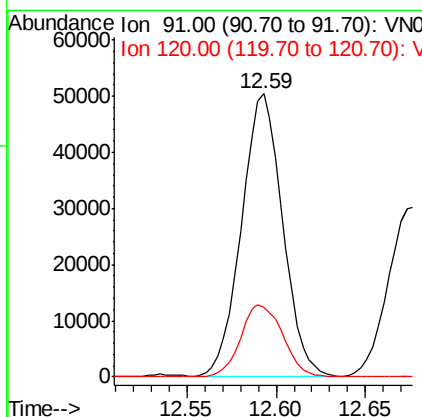
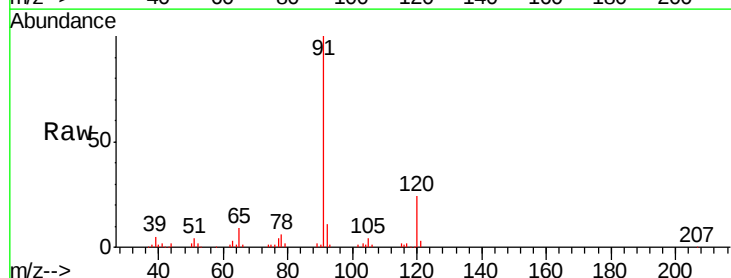
RT: 12.59 min Scan# 3365

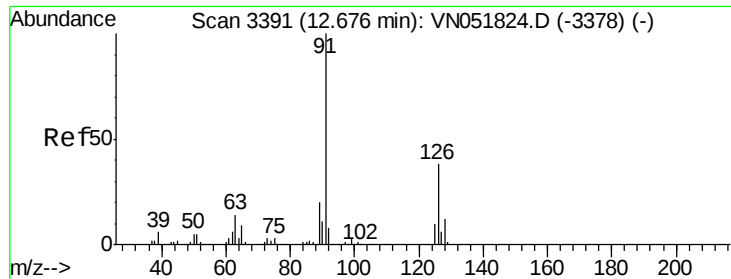
Delta R.T. 0.00 min

Lab File: VN051833.D

Acq: 12 Oct 2018 15:26

Tgt Ion	Ratio	Resp	Lower	Upper
91	100	81463		
120	25.9	0.0	45.0	





#75

2-Chlorotoluene

Concen: 2.43 ug/l

RT: 12.68 min Scan# 3391

Delta R.T. -0.00 min

Lab File: VN051833.D

Acq: 12 Oct 2018 15:26

Instrument :

MSVOA_N

ClientSampleId :

MDL-WATER-03-QT4-2018

Tgt Ion: 91 Resp: 52198

Ion Ratio Lower Upper

91 100

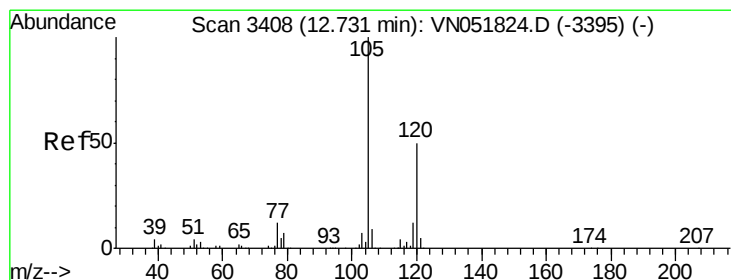
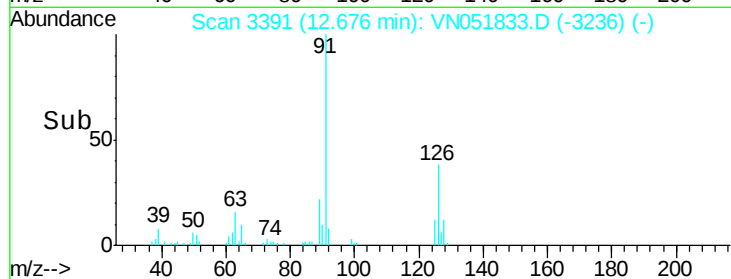
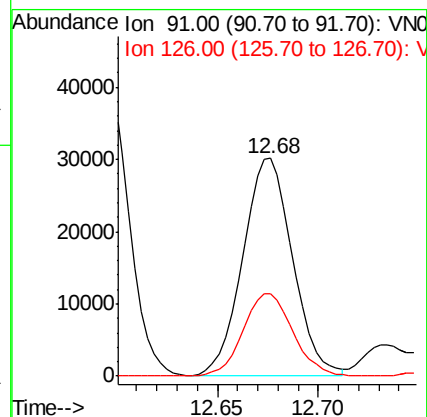
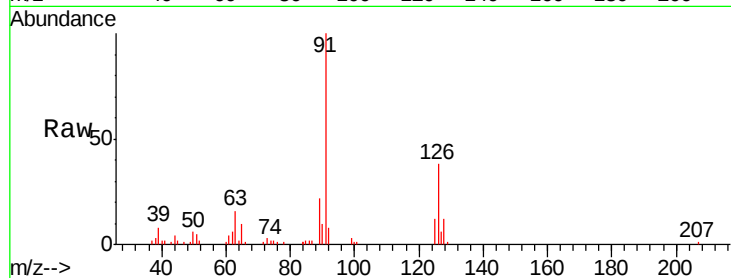
126 37.8 0.0 67.6

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#76

1,3,5-Trimethylbenzene

Concen: 2.29 ug/l

RT: 12.73 min Scan# 3409

Delta R.T. -0.00 min

Lab File: VN051833.D

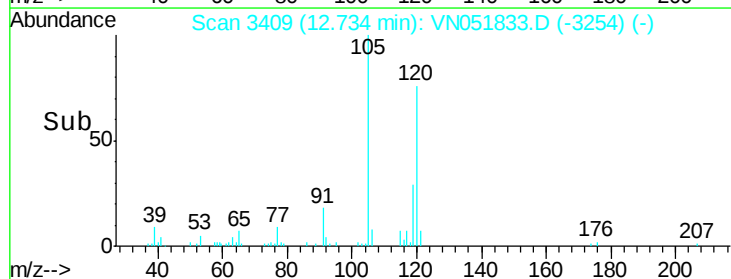
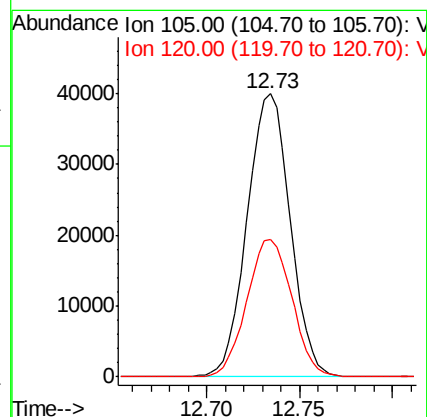
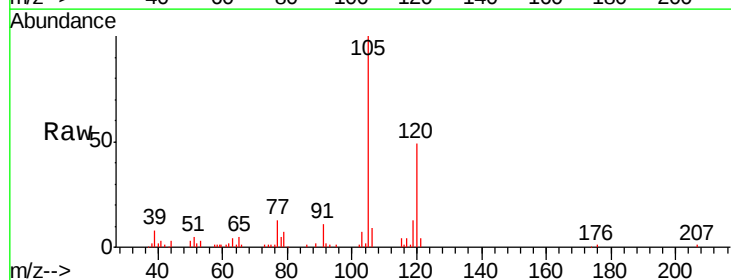
Acq: 12 Oct 2018 15:26

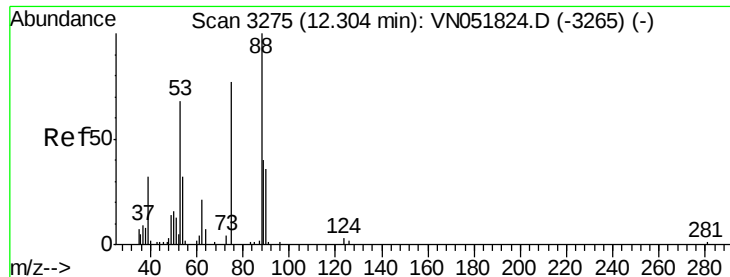
Tgt Ion: 105 Resp: 64373

Ion Ratio Lower Upper

105 100

120 50.9 0.0 98.2





#77

t-1,4-Dichloro-2-butene

Concen: 1.68 ug/l

RT: 12.31 min Scan# 3276

Delta R.T. 0.01 min

Lab File: VN051833.D

Acq: 12 Oct 2018 15:26

Instrument :

MSVOA_N

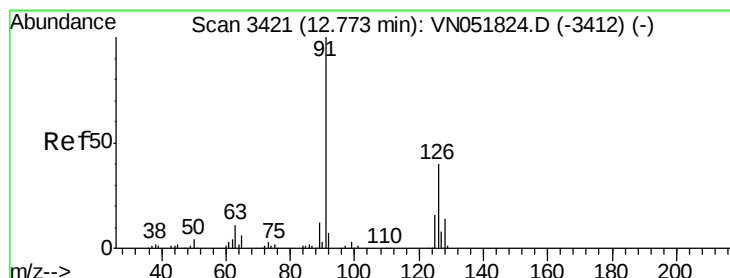
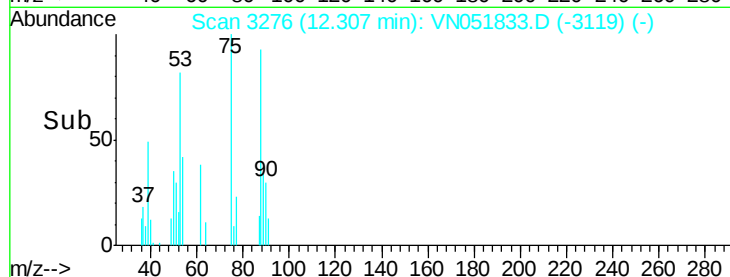
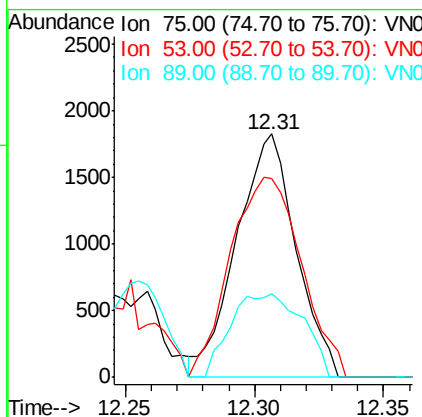
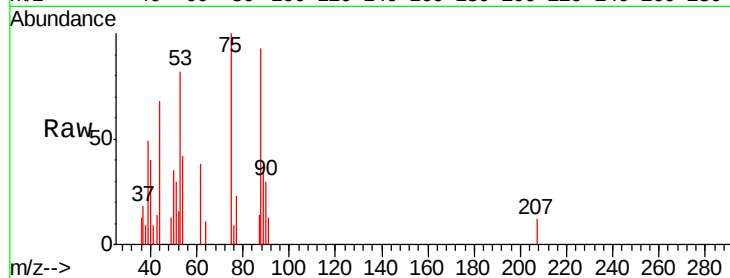
ClientSampleId :

MDL-WATER-03-QT4-2018

Tgt Ion:	75	Resp:	2929
Ion	Ratio	Lower	Upper
75	100		
53	81.8	46.3	138.9
89	34.5	24.6	73.8

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#78

4-Chlorotoluene

Concen: 2.07 ug/l

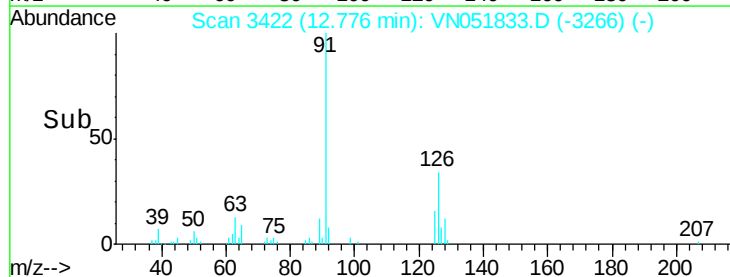
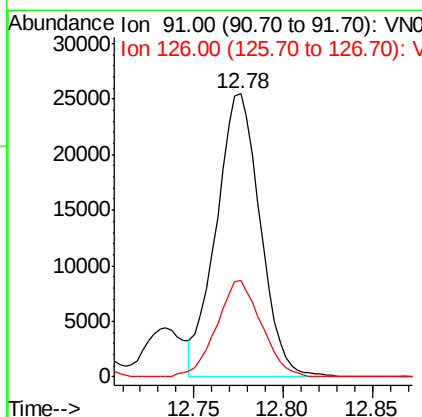
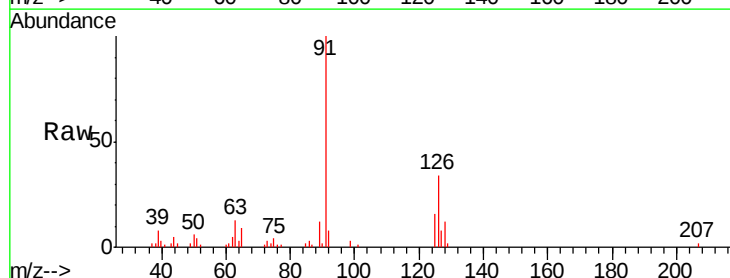
RT: 12.78 min Scan# 3422

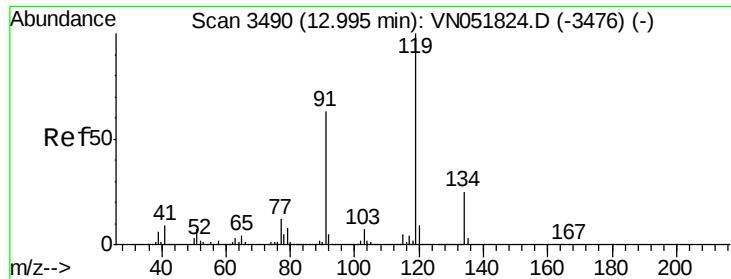
Delta R.T. 0.00 min

Lab File: VN051833.D

Acq: 12 Oct 2018 15:26

Tgt Ion:	91	Resp:	43674
Ion	Ratio	Lower	Upper
91	100		
126	34.6	0.0	65.2





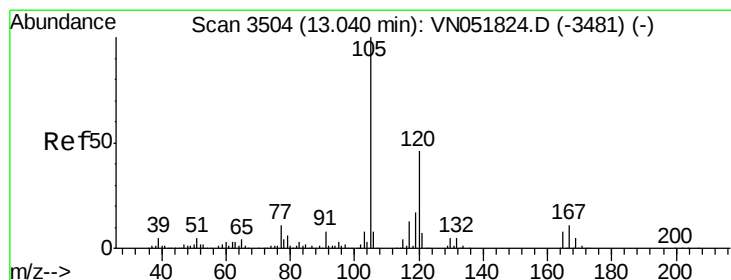
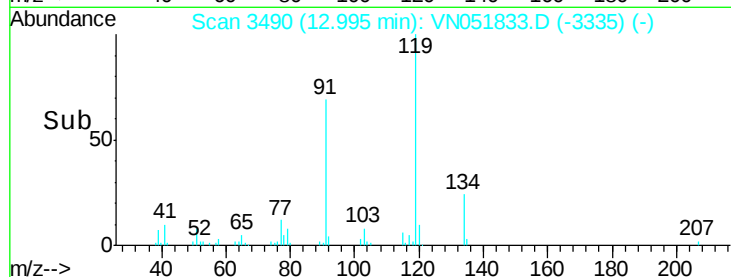
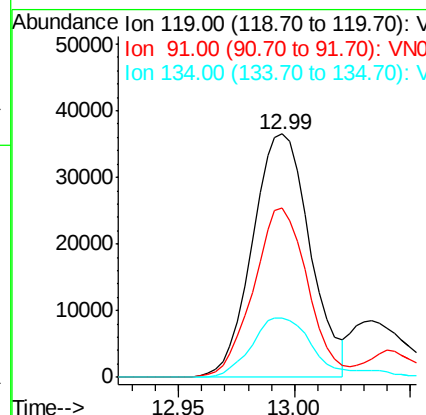
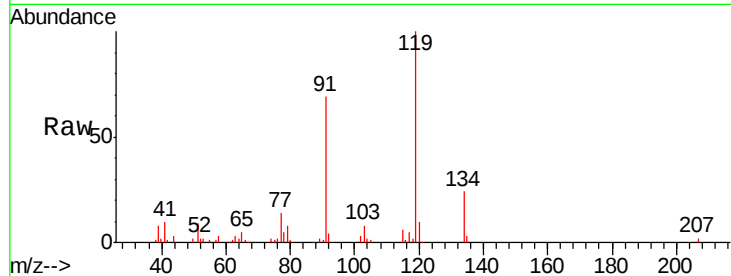
#79
tert-butylbenzene
Concen: 2.44 ug/l
RT: 12.99 min Scan# 3490
Delta R.T. -0.00 min
Lab File: VN051833.D
Acq: 12 Oct 2018 15:26

Instrument :
MSVOA_N
ClientSampleId :
MDL-WATER-03-QT4-2018

Tgt Ion	Ratio	Resp	Lower	Upper
119	100	63125		
91	65.4	0.0	131.6	
134	25.2	0.0	46.2	

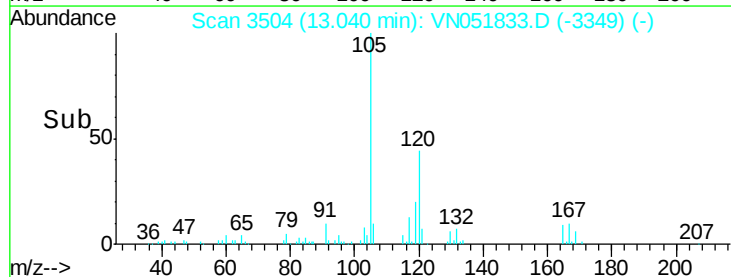
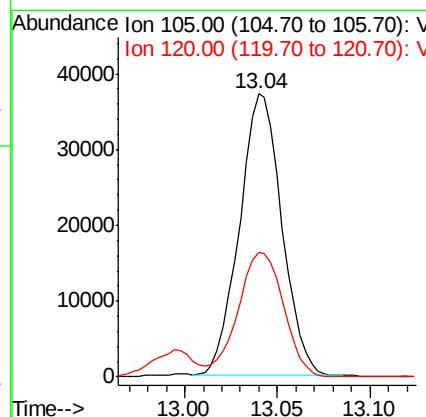
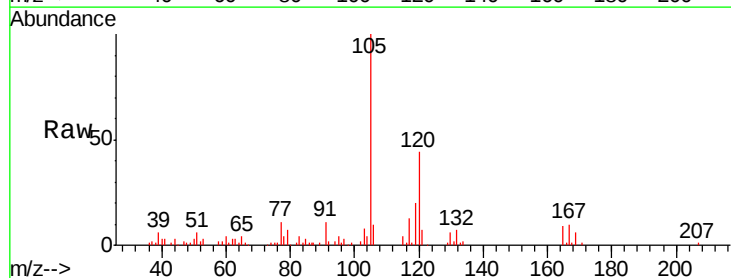
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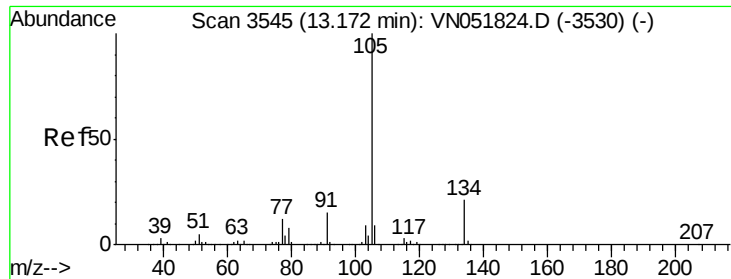
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#80
1,2,4-Trimethylbenzene
Concen: 2.10 ug/l
RT: 13.04 min Scan# 3504
Delta R.T. -0.00 min
Lab File: VN051833.D
Acq: 12 Oct 2018 15:26

Tgt Ion	Ratio	Resp	Lower	Upper
105	100	58902		
120	47.6	0.0	89.6	





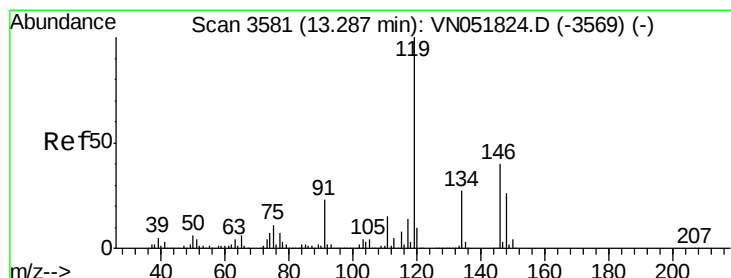
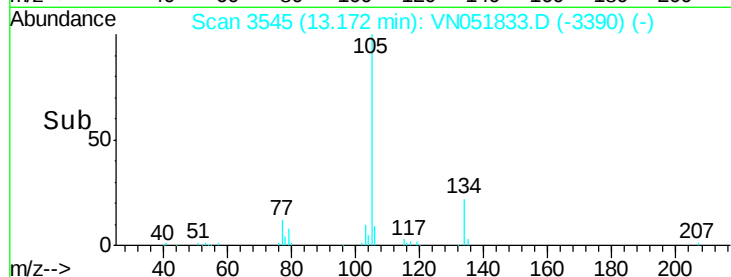
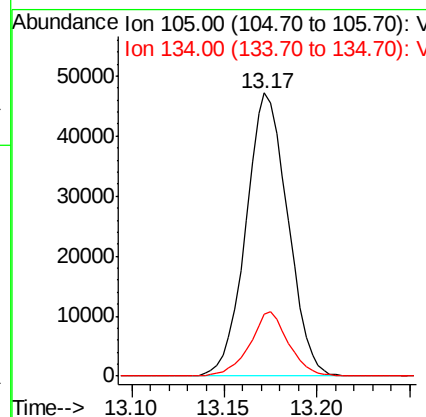
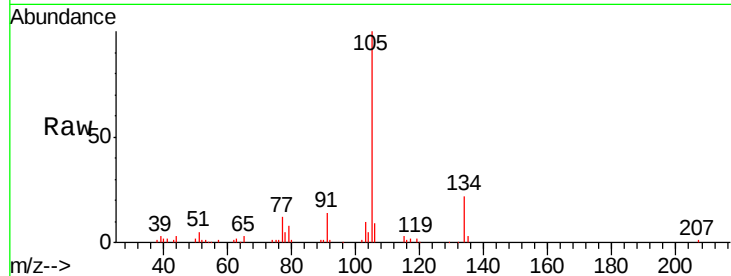
#81
 sec-Butylbenzene
 Concen: 2.18 ug/l
 RT: 13.17 min Scan# 3545
 Delta R.T. -0.00 min
 Lab File: VN051833.D
 Acq: 12 Oct 2018 15:26

Instrument :
 MSVOA_N
 ClientSampleId :
 MDL-WATER-03-QT4-2018

Tgt Ion	Ratio	Lower	Upper
105	100		
134	21.0	0.0	39.4

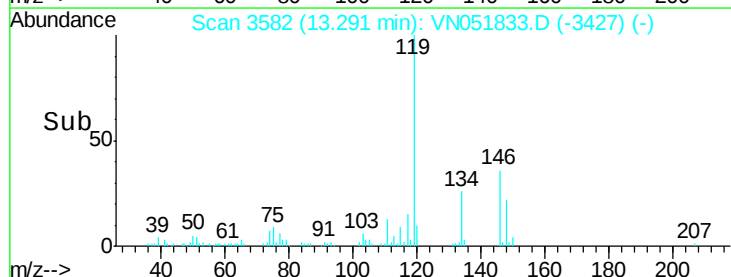
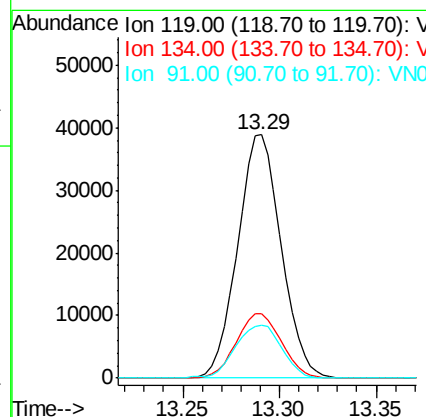
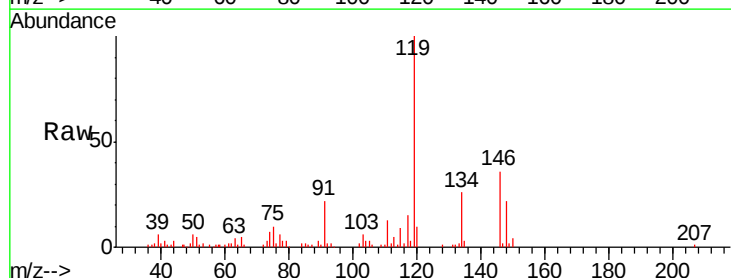
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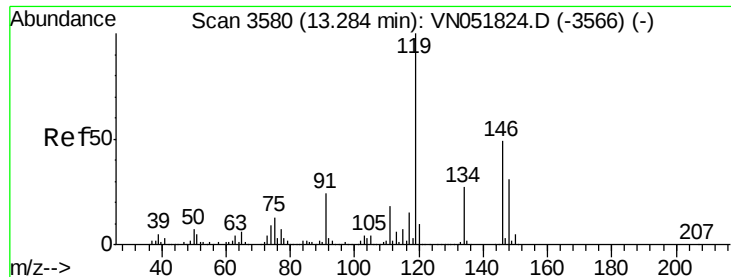
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#82
 p-Isopropyltoluene
 Concen: 2.01 ug/l
 RT: 13.29 min Scan# 3582
 Delta R.T. -0.00 min
 Lab File: VN051833.D
 Acq: 12 Oct 2018 15:26

Tgt Ion	Ratio	Lower	Upper
119	100		
134	27.5	0.0	53.6
91	23.0	0.0	52.0





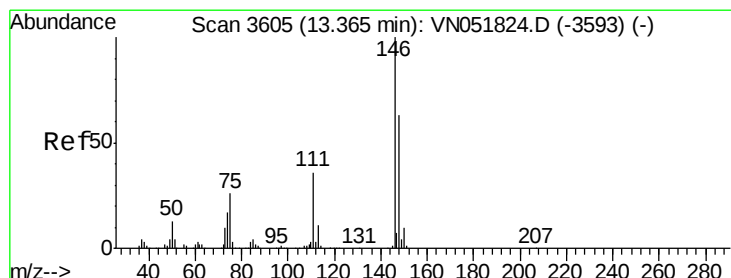
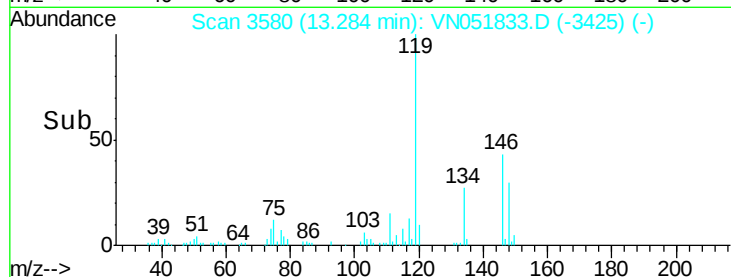
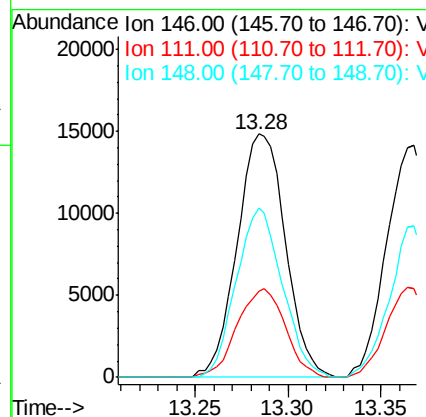
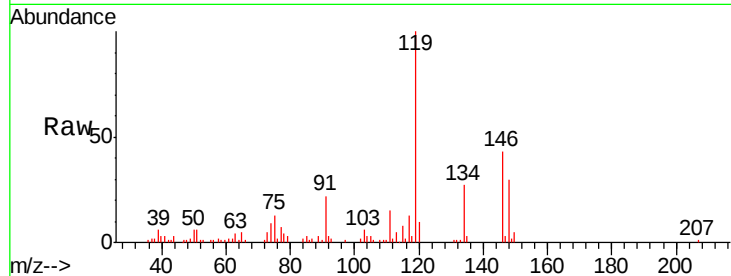
#83
 1,3-Dichlorobenzene
 Concen: 1.80 ug/l
 RT: 13.28 min Scan# 3580
 Delta R.T. -0.00 min
 Lab File: VN051833.D
 Acq: 12 Oct 2018 15:26

Instrument :
 MSVOA_N
 ClientSampleId :
 MDL-WATER-03-QT4-2018

Tgt Ion	Ratio	Lower	Upper
146	100		
111	36.2	18.1	54.3
148	66.5	31.3	93.8

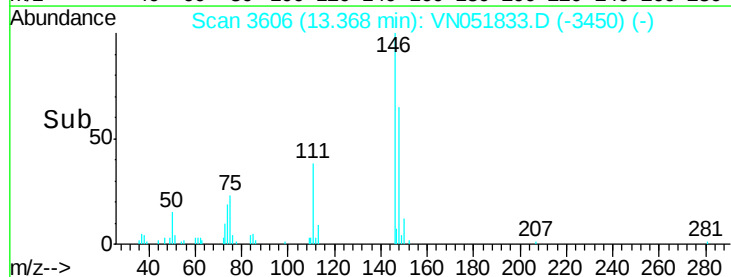
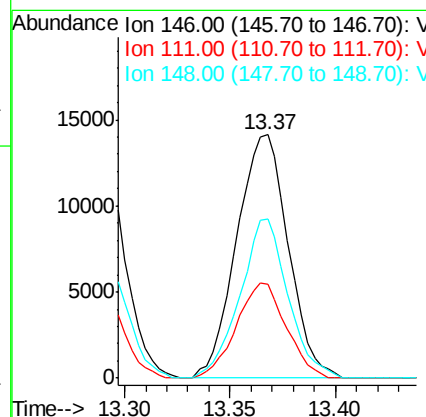
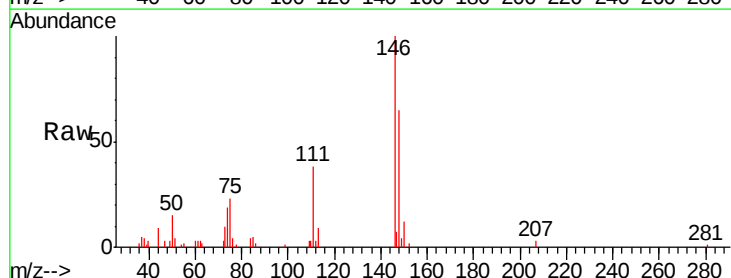
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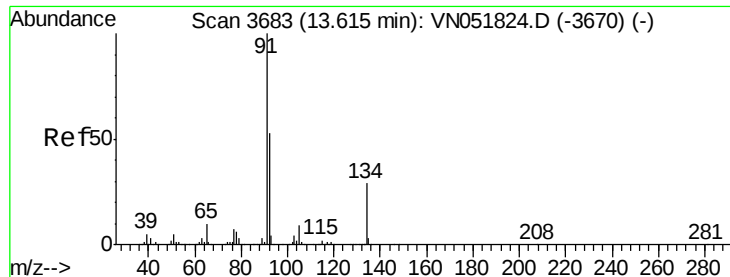
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#84
 1,4-Dichlorobenzene
 Concen: 1.72 ug/l
 RT: 13.37 min Scan# 3606
 Delta R.T. 0.00 min
 Lab File: VN051833.D
 Acq: 12 Oct 2018 15:26

Tgt Ion	Ratio	Lower	Upper
146	100		
111	37.6	17.4	52.2
148	60.7	32.8	98.3





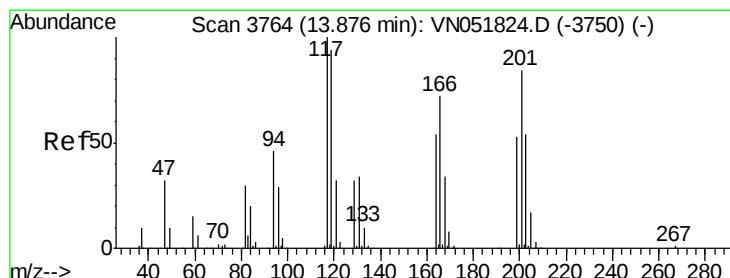
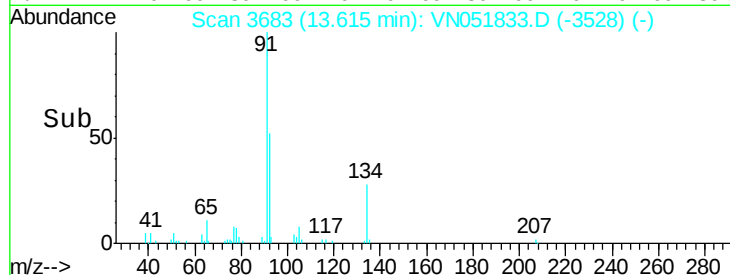
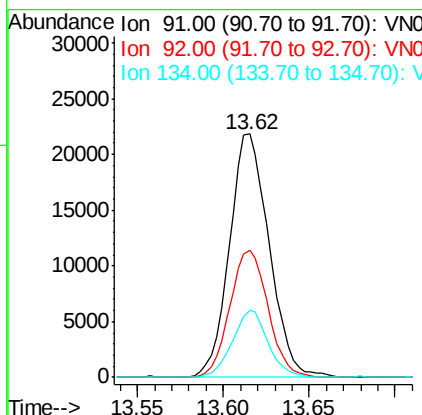
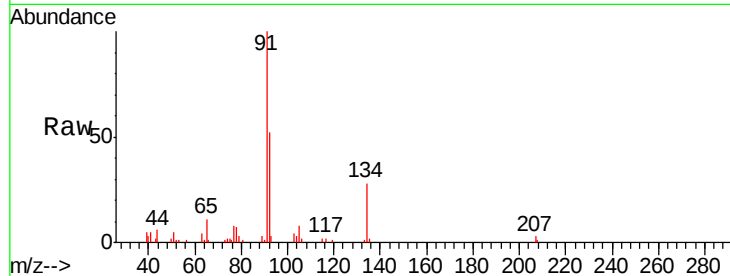
#85
n-Butylbenzene
Concen: 1.53 ug/l
RT: 13.62 min Scan# 3683
Delta R.T. -0.00 min
Lab File: VN051833.D
Acq: 12 Oct 2018 15:26

Instrument :
MSVOA_N
ClientSampleId :
MDL-WATER-03-QT4-2018

Tgt Ion	Ratio	Lower	Upper
91	100		
92	50.2	0.0	97.4
134	24.7	0.0	49.6

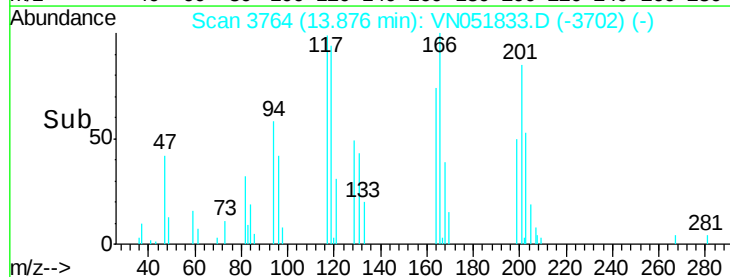
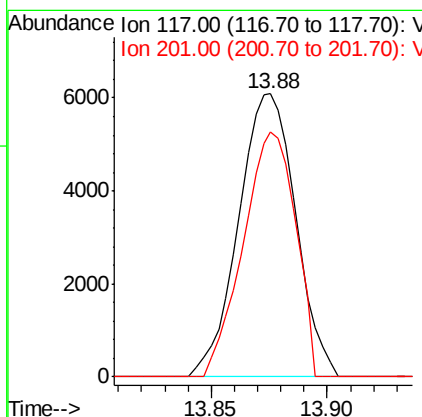
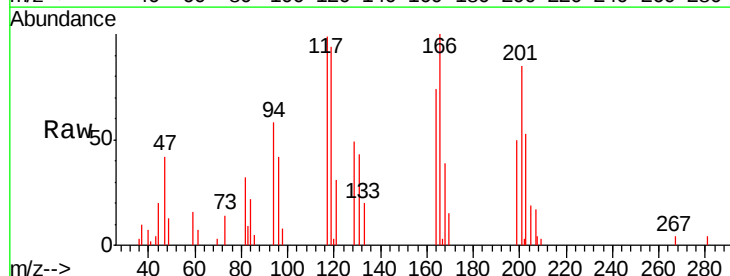
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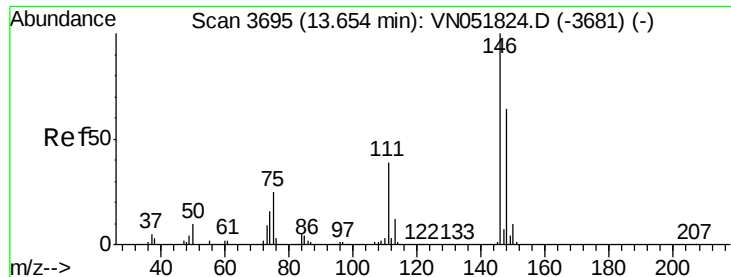
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#86
Hexachloroethane
Concen: 2.00 ug/l
RT: 13.88 min Scan# 3764
Delta R.T. -0.00 min
Lab File: VN051833.D
Acq: 12 Oct 2018 15:26

Tgt Ion	Ratio	Lower	Upper
117	100		
201	79.3	47.8	143.3





#87

1,2-Dichlorobenzene

Concen: 1.88 ug/l

RT: 13.65 min Scan# 3695

Delta R.T. -0.00 min

Lab File: VN051833.D

Acq: 12 Oct 2018 15:26

Instrument :

MSVOA_N

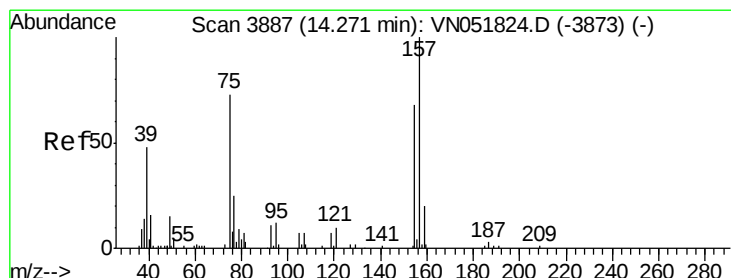
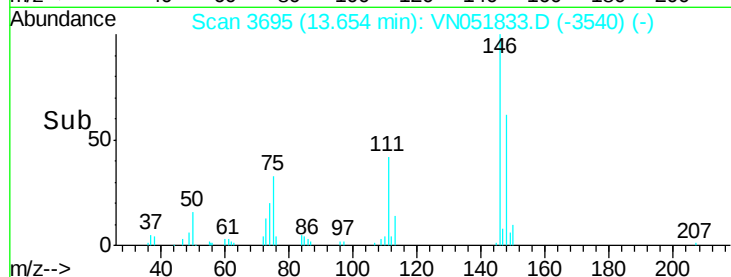
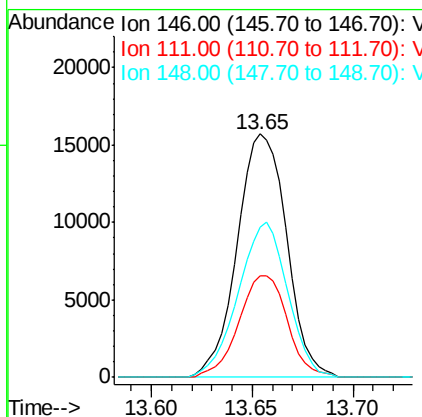
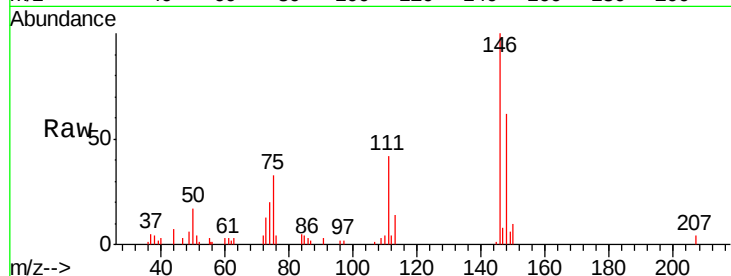
ClientSampleId :

MDL-WATER-03-QT4-2018

Tgt Ion	Ratio	Lower	Upper
146	100		
111	41.0	20.8	62.2
148	63.6	33.2	99.6

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#88

1,2-Dibromo-3-Chloropropane

Concen: 1.86 ug/l

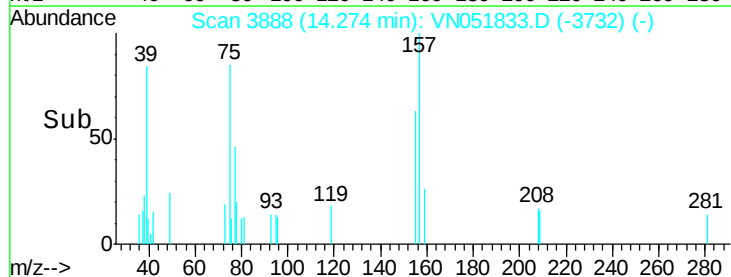
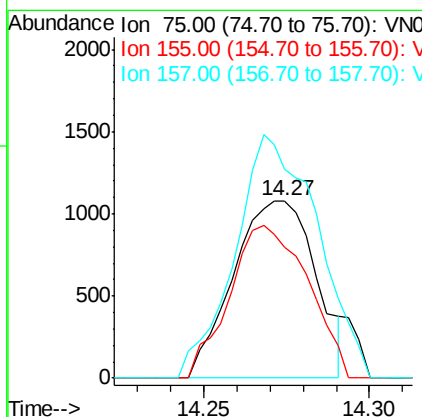
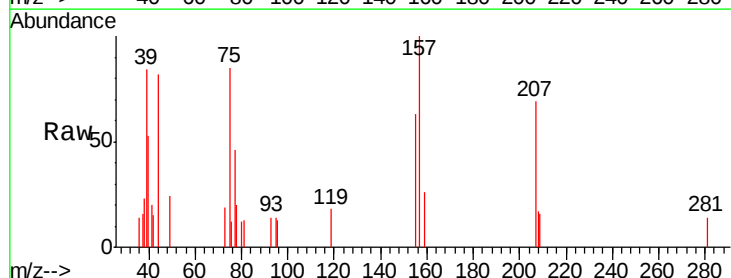
RT: 14.27 min Scan# 3888

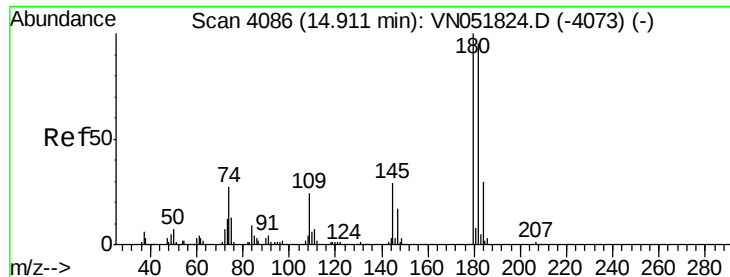
Delta R.T. 0.00 min

Lab File: VN051833.D

Acq: 12 Oct 2018 15:26

Tgt Ion	Ratio	Lower	Upper
75	100		
155	82.2	57.0	85.6
157	137.8	87.4	131.0#





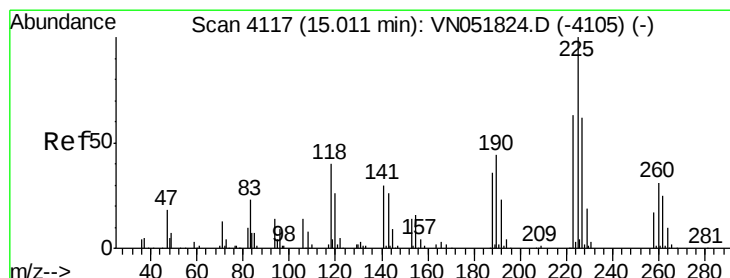
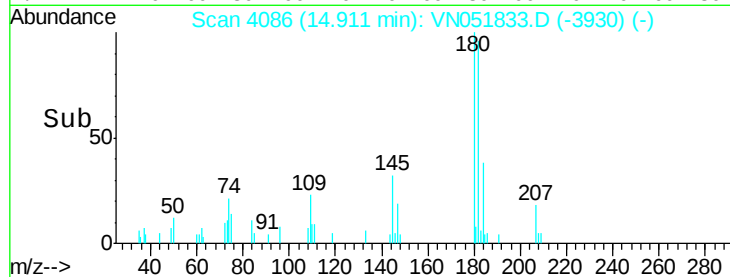
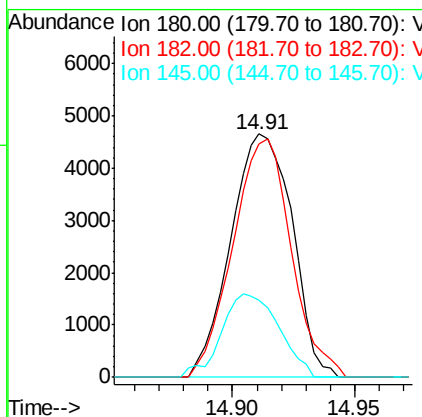
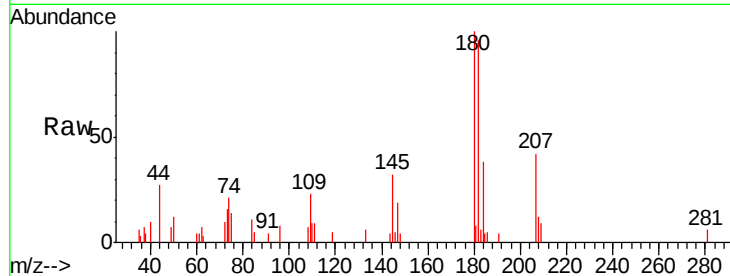
#89
 1,2,4-Trichlorobenzene
 Concen: 8.58 ug/l
 RT: 14.91 min Scan# 4086
 Delta R.T. 0.00 min
 Lab File: VN051833.D
 Acq: 12 Oct 2018 15:26

Instrument :
 MSVOA_N
 ClientSampleId :
 MDL-WATER-03-QT4-2018

Tgt Ion	Ratio	Lower	Upper
180	100		
182	93.2	77.7	116.5
145	30.7	23.4	35.2

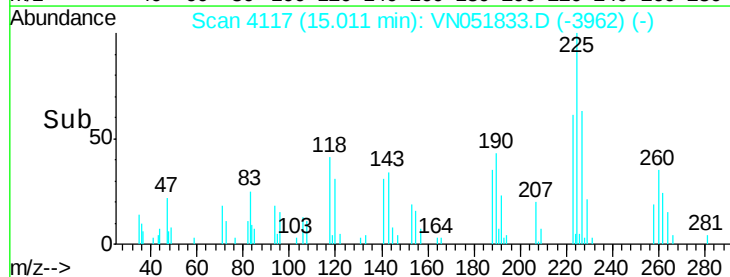
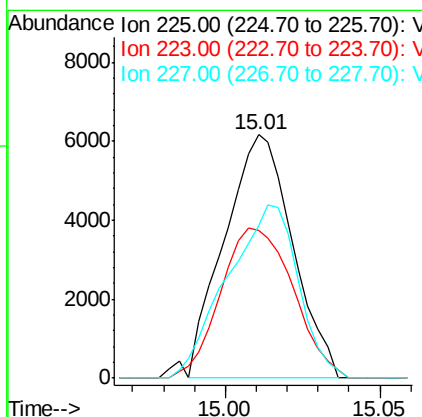
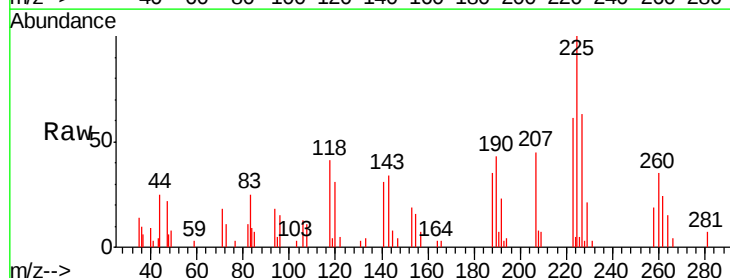
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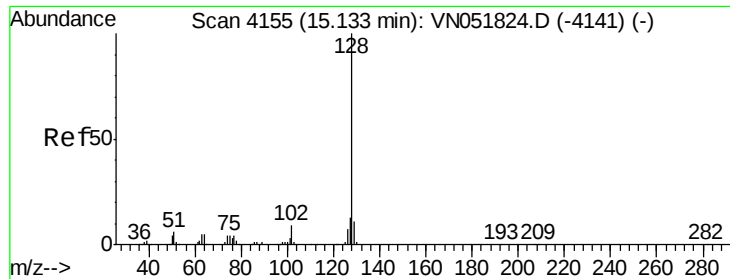
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#90
 Hexachlorobutadiene
 Concen: 2.03 ug/l
 RT: 15.01 min Scan# 4117
 Delta R.T. -0.00 min
 Lab File: VN051833.D
 Acq: 12 Oct 2018 15:26

Tgt Ion	Ratio	Lower	Upper
225	100		
223	65.9	0.0	117.0
227	74.1	0.0	127.0





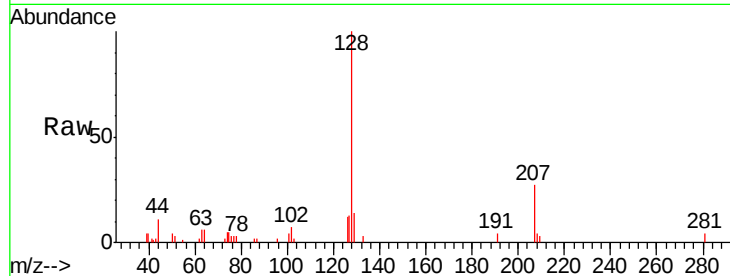
#91
Naphthalene
Concen: 9.57 ug/l
RT: 15.13 min Scan# 4155
Delta R.T. 0.00 min
Lab File: VN051833.D
Acq: 12 Oct 2018 15:26

Instrument :
MSVOA_N
ClientSampleId :
MDL-WATER-03-QT4-2018

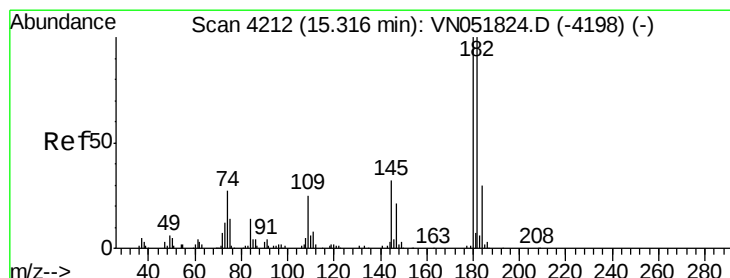
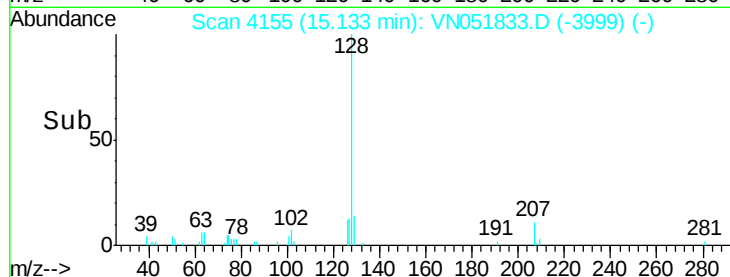
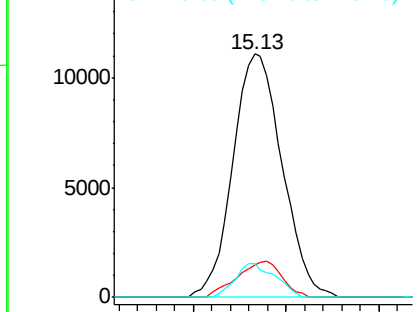
Tgt Ion	Ratio	Resp	Lower	Upper
128	100	20398		
127	13.5	10.1	15.1	
129	11.3	8.4	12.6	

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MMDadoda
10/15/2018 11:27:58 AM

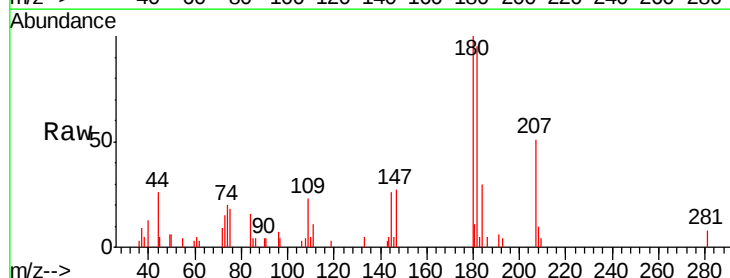


Abundance Ion 128.00 (127.70 to 128.70): V
Ion 127.00 (126.70 to 127.70): V
Ion 129.00 (128.70 to 129.70): V



#92
1,2,3-Trichlorobenzene
Concen: 1.43 ug/l
RT: 15.32 min Scan# 4212
Delta R.T. 0.00 min
Lab File: VN051833.D
Acq: 12 Oct 2018 15:26

Tgt Ion	Ratio	Resp	Lower	Upper
180	100	9351		
182	102.6	0.0	198.0	
145	27.1	0.0	36.8	



Abundance Ion 180.00 (179.70 to 180.70): V
Ion 182.00 (181.70 to 182.70): V
Ion 145.00 (144.70 to 145.70): V

